Manitoba
Sustainable Development
Innovations Fund

Annual Report
2002 – 2003

Manitoba

104-00415/

Manitoba
Sustainable Development
Innovations Fund

Annual Report
2002 – 2003

Manitoba

MINISTER OF CONSERVATION

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

The Honourable Peter M. Liba, C.M.
Lieutenant Governor of Manitoba
Government House
Winnipeg, Manitoba

Your Honour:

I am pleased to present you with the Annual Report of the Sustainable Development Innovations Fund for the period of April 1, 2002 to March 31, 2003.

Yours truly,

Steve Ashton
Minister

Manitoba

Conservation

Pollution Prevention

123 Main Street, Suite 160
Winnipeg MB R3C 1A5
CANADA

The Honourable Steve Ashton
Minister of Conservation
333 Legislative Building
Winnipeg MB R3C 0V8

Dear Sir:

It is my pleasure to present the Annual Report of the Sustainable Development Innovations Fund for the fiscal year 2002 – 2003.

Respectfully submitted,

Laurie Streich
A/Director

TABLE OF CONTENTS

TITLE	PAGE
PREFACE	1
NEW PROJECTS APPROVED DURING THE 2002/03 FISCAL YEAR	
ECO-TOURISM	15
ECOSYSTEM CONSERVATION	17
ENVIRONMENTAL TECHNOLOGY INNOVATION AND DEMONSTRATION	21
NORTHERN COMMUNITY DEVELOPMENT AND ENVIRONMENTAL ISSUES	24
REGIONAL WASTE MANAGEMENT	26
SUSTAINABLE AGRICULTURAL PRACTICES	28
SUSTAINABLE COMMUNITY DEVELOPMENT	32
UNDERSTANDING OUR ENVIRONMENT	36
WATER	47
BROAD ALLOCATIONS	51
- ENVIRONMENTAL YOUTH CORPS (EYC)	52
- MANITOBA CLIMATE CHANGE ACTION FUND (MCCAF)	61
- MANITOBA HABITAT HERITAGE CORPORATION SOUTHWEST (AGRO) WOODLOT PROGRAM	69
- ORPHAN MINE SITE ASSESSMENT PROGRAM	72
- ORPHAN MINE SITE REHABILITATION PROGRAM	75
- WASTE REDUCTION AND POLLUTION PREVENTION (WRAPP) FUND	78
- ZEBRA MUSSEL PROGRAM	92
PROJECTS CARRIED OVER FROM PREVIOUS FISCAL YEARS	96
APPENDIX I FIVE YEAR EXPENDITURE SUMMARY	99

PREFACE

Organization of Report

The format of the 2002/2003 Annual Report is similar to previous Annual Reports in that funded projects are presented by category and program areas.

Projects are listed in the following categories and program areas:
Open Priority Program Areas:

- Eco-tourism
- Ecosystem Conservation
- Environmental Technology Innovation and Demonstration
- Northern Community Development and Environmental Issues
- Regional Waste Management
- Sustainable Agricultural Practices
- Sustainable Community Development
- Understanding Our Environment
- Water

Broad Allocations:

- Environmental Youth Corps
- Manitoba Climate Change Action Fund
- Manitoba Habitat Heritage Corporation Southwest (Agro) Woodlot Program
- Orphan Mine Site Assessment Program
- Orphan Mine Site Rehabilitation Program
- Waste Reduction and Pollution Prevention Fund
- Zebra Mussel Program

Purpose

The Sustainable Development Innovations Fund was created in October 1989 to provide financial assistance towards development, implementation and promotion of environmental innovation and sustainable development projects. The fund was continued under *The Sustainable Development Act*, proclaimed July 1, 1998.

The Fund provides grants in support of innovative projects, activities, research and developments that further the sustainability of Manitoba's environment, economy, human health and social well-being, and support sustainable economic growth. The Fund encourages creation of partnerships towards improving this sustainability.

Projects qualifying for support must:

- address one or more of the priority areas;
- demonstrate measurable progress towards achieving one or more of the Fund's objectives;
- promote a sustainable approach, have clear environmental benefits, and take into account benefits to the community and the economy;
- be environmentally and ecologically sound;
- involve youth where possible;
- adhere to a realistic budget and use appropriate resources to conduct the project;
- have a distinct start and finish, and be implemented in a timely fashion;
- have written support from all entities, including financial contributions, in-kind project support and/or technical expertise;
- conduct project activities in Manitoba or be of benefit to Manitoba; and
- have a clear concrete plan for future use, sharing, or replication.

Ineligible applications and funding requests include:

- projects that will result in proprietary knowledge and being held exclusively by the grant recipient;
- applications for debt financing or cost recovery purposes;
- purchase of playground and recreational equipment;
- purchase of real property, including land, buildings or vehicles;
- ongoing administration and established operational budgets;
- initiatives that need to be undertaken as a result of a government order, such as removal of petroleum distribution systems, investigations, and remediation.

Source of Revenue

Revenue for the fund is derived from an environmental protection tax on glass liquor bottles and disposable diapers.

Process

The Pollution Prevention (P2) Branch of Manitoba Conservation administers the Sustainable Development Innovations Fund with the cooperation of provincial government departments. Proposals submitted for funding consideration are evaluated against the SDIF criteria by provincial staff. The evaluations are compiled and summarized and then submitted for review to the SDIF Advisory Review Committee, which is comprised of representatives from provincial government departments. The Advisory Committee reviews the proposals and the evaluations and makes funding recommendations to the Minister of Conservation. The Minister of Conservation has delegated approval authority for projects receiving funding of $25,000 or less. Projects to be awarded funding in excess of $25,000 are subject to Treasury Board approval.

Communication

The Sustainable Development Innovations Fund is promoted through the following activities:

- Manitoba Round Table activities (speaking engagements, etc.)
- Pollution Prevention web site – http://www.gov.mb.ca/conservation/pollutionprevention
- Community events, trade shows, exhibitions
- Ministerial announcement of funded projects
- News releases
- Acknowledgement in publications, printed material, and signage of funded projects
- Listing in Funding Directories
- Provincial government offices and staff
- Word of mouth

A total allocation of $2.96 million was authorized to support the SDIF Open category, comprising nine priority program areas, and seven targeted broad allocations. The targeted allocations are:

- Environmental Youth Corps (EYC)
- Manitoba Climate Change Action Fund (MCCAF)
- Manitoba Habitat Heritage Corporation Southwest Agro-Woodlot Program
- Orphan Mine Site Rehabilitation Program
- Orphan Mine Site Assessment Program
- Waste Reduction and Pollution Prevention (WRAPP) Fund
- Zebra Mussel Program

The MCCAF is managed by Manitoba Energy, Science and Technology and the Orphan Mines Site Rehabilitation Program is managed by Manitoba Industry, Trade and Mines. The remaining broad allocations are administered by Manitoba Conservation.

Forty-nine new projects were approved for funding from the Open Category of the SDIF in 2002/03, expending approximately $1.1 million. Projects funded include ventures that focus on Aboriginal interests, youth programming, training initiatives and scientific analysis. The seven broad allocations spent approximately $1.7 million, while $93,000 was expended on six projects carried over from previous fiscal years. In total, $2,956,317 was expended against a total of $2,957,000. A summary of project expenditures under the Open Category — Priority Program Areas and Broad Allocations is presented on the following pages.

OPEN CATEGORY — PRIORITY PROGRAM AREAS

Eco-tourism:

A total of $30,310.00 was expended in 2002/2003 for two projects described in the eco-tourism category. The projects approved under this category are initiatives that address ecosystem preservation, public education and economic opportunities through tourism with a priority on rural and northern communities.

Ecosystem Conservation:

A total of $67,300.00 was expended in 2002/2003 for six projects in the ecosystem category. The objectives of this category are to conserve resources, preserve and maintain urban forests and ecosystems and rehabilitate and revitalize degraded areas.

Environmental Technology Innovation and Demonstration:

A total of $74,000.00 was expended in 2002/2003 for three projects in the environmental technology innovation and demonstration category. Projects that fall within this category include, but are not limited to, feasibility studies, research and development of new products and processes, environmental technology demonstrations, and special projects, such as strategic studies relating to industrial sectors.

Northern Community Development and Environmental Issues:

A total of $84,533.00 was expended during the 2002/2003 fiscal year for two projects funded in the northern community development and environmental issues category. Projects in this category reflect the enhancement of the environment and sustainable economic development activities of northern and remote communities, with a priority on Aboriginal communities.

Regional Waste Management:

A total of $23,500.00 was expended during the 2002/2003 fiscal year for two projects in the regional waste management category. The objectives of this category are to develop and enhance waste transfer stations with the goal of minimizing environmental risk from landfill waste.

Sustainable Agricultural Practices:

A total of $307,347.69 was expended during the 2002/2003 fiscal year for six projects in the sustainable agricultural practices category. Projects that fall within this category include research, demonstration projects, and feasibility studies on agricultural practices that protect the environment and that will assist in diversifying Manitoba's agricultural sector.

Sustainable Community Development:

A total of $113,100.00 was expended during the 2002/2003 fiscal year for five projects in the sustainable community development category. Sustainable community practices include eco-efficiency initiatives, environmental stewardship, capacity building mechanisms, and encouragement of inner city revitalization, with and emphasis on partnerships with Aboriginal people and youth.

Understanding Our Environment:

A total of $309,879.47 was expended during the 2002/2003 fiscal year for eighteen projects in the understanding our environment category. Projects that fit into this category help Manitobans make educated decisions and take action regarding the environment, such as education and awareness activities, training, research, seminars and forums.

Water:

A total of $137,700.00 was expended during the 2002/2003 fiscal year for five projects in the water category. Projects in this category include initiatives that address aquatic nuisance species, livestock stewardship, water quality protection, wise and efficient use of water resources, and scientific and technological innovation in the development, testing, and implementation of technologies that reduce water waste and conserve water.

BROAD ALLOCATIONS

Environmental Youth Corps:

A total of $200,000.00 was expended during the 2002/2003 fiscal year for 75 projects funded through the Environmental Youth Corps (EYC) and the administrative cost of managing the Fund. The EYC supports projects in the various regions of Manitoba that include water quality, waste minimization, protection of flora and fauna, rehabilitation and conservation of the natural environment, wildlife conservation and habitat preservation.

Manitoba Climate Change Action Fund:

A total of $249,997.57 was expended during the 2002/2003 fiscal year for 13 projects funded through the Manitoba Climate Change Action Fund (MCCAF). The priority areas within MCCAF include education and outreach, impacts and adaptation, technical innovation and energy efficiency.

Manitoba Habitat Heritage Corporation (MHHC) Southwest (Agro) Woodlot Program

A total of $210,870.00 was expended during the 2002/2003 fiscal year to maintain the MHHC Southwest Woodlot Program at its existing level of funding once the Canada-Manitoba agreement was terminated. This program was established to encourage private landowners in southwestern Manitoba to use Agro-forestry and woodlot management practices that diversify farm income and maintain wildlife habitat.

Orphan Mine Site Assessment Program

A total of $231,652.08 was expended by the Department of Conservation during the 2002/2003 fiscal year to undertake two independent assessments of identified orphan mine sites and adjacent environment to characterize and determine the management strategy to protect the environment and residents.

Orphan Mine Site Rehabilitation Program:

A total of $249,599.04 was expended by Manitoba Industry, Trade and Mines during the 2002/2003 fiscal year to carry out rehabilitation measures at orphan mine sites in northern Manitoba.

Waste Reduction and Pollution Prevention (WRAPP) Fund:

A total of $549,831.56 was expended during the 2002/2003 fiscal year for 32 projects funded through the Waste Reduction and Pollution Prevention Fund (WRAPP). The priority areas within the WRAPP Fund include composting, construction and demolition (C&D) waste management, green procurement, institutional waste reduction, integrated waste management, market development, pollution prevention, promotion and education and regional recycling.

Zebra Mussel Program:

A total of $23,929.55 was expended by Manitoba Conservation during the 2002/2003 fiscal year to undertake activities that will prevent the spread of zebra mussels into Manitoba lakes, rivers and streams.

Table 1: Summary of SDIF Open Category and Broad Allocation Projects

Project Categories	Number of Projects Allocated Funding in 2002/2003	Amount Expended
Open Category		
Eco-tourism	2	$30,310.00
Ecosystem Conservation	6	$67,300.00
Environmental Technology Innovation and Demonstration	3	$74,000.00
Northern Community Development and Environmental Issues	2	$84,533.00
Regional Waste Management	2	$23,500.00
Sustainable Agricultural Practices	6	$307,347.69
Sustainable Community Development	5	$113,100.00
Understanding Our Environment	18	$309,879.47
Water	5	$137,700.00
Broad Allocations		
Environmental Youth Corps (EYC)	75	$200,000.00
Manitoba Climate Change Action Fund (MCCAF)	13	$249,997.57
Manitoba Habitat Heritage Corporation Southwest (Agro) Woodlot Program[1]	N/A	$210,870.00
Orphan Mine Site Assessment Program	N/A	$231,652.08
Orphan Mine Site Rehabilitation Program	N/A	$249,599.04
Waste Reduction and Pollution Prevention (WRAPP) Fund	32	$549,831.56
Zebra Mussel Program	N/A	$23,929.55
Total for Broad Allocations	**120**	**$1,715,879.80**
Total for Open Category	**49**	**$1,147,670.16**
Projects Carried Over into 2002/03	**6**	**$92,767.00**
Total for SDIF	**175**	**$2,956,316.96**

[1] The Manitoba Habitat Heritage Corporation Southwest (Agro) Woodlot Program, the Orphan Mine Site Assessment Program, the Orphan Mine Site Rehabilitation Program and the Zebra Mussel Program support specific activities related to these issues and do not award grants to project proponents.

PRÉFACE

Structure du rapport

La structure du rapport annuel de 2002-2003 est semblable à celle des précédents, en ceci que les projets financés sont présentés par domaines de programmes et par catégories d'attribution.

Les domaines de programmes et les catégories d'attribution des projets sont les suivants :

Domaines de programmes prioritaires :
- Écotourisme;
- Conservation des écosystèmes;
- Innovation et démonstration de technologie environnementale;
- Environnement et développement communautaire du Nord;
- Gestion régionale des déchets;
- Pratiques agricoles durables;
- Développement durable des collectivités;
- Comprendre notre environnement;
- Eau.

Catégories d'attribution générales :
- Brigades des jeunes environnementalistes;
- Fonds d'action pour le changement climatique du Manitoba;
- Programme de protection des terrains boisés du Manitoba pour la région du Sud-Ouest, géré par la Société protectrice du patrimoine écologique du Manitoba;
- Programme d'évaluation des mines abandonnées du Manitoba;
- Programme de remise en état des mines abandonnées du Manitoba;
- Fonds pour la réduction du volume des déchets et la prévention de la pollution;
- Programme de lutte contre la moule zébrée.

Objet

Le Fonds des innovations de développement durable a été créé en octobre 1989 afin de consacrer de l'aide financière au développement, à la mise en œuvre et à la promotion de projets d'innovation environnementale et de développement durable. Ce fonds a été prorogé en vertu de la *Loi sur le développement durable*, promulguée le 1er juillet 1998.

Le Fonds procure du financement destiné aux projets novateurs, aux activités, à la recherche et au développement susceptibles d'augmenter la viabilité de l'environnement, de l'économie, de la santé humaine et du bien-être social du Manitoba, et de soutenir une croissance économique durable. Il encourage la création de partenariats visant à améliorer cette viabilité.

Pour être admissibles, les projets doivent :

- correspondre à un ou plusieurs des domaines prioritaires;
- faire état de progrès mesurables vers la réalisation d'un ou plusieurs des objectifs du Fonds;
- promouvoir une approche durable, présenter des avantages manifestes pour l'environnement et tenir compte des avantages pour la collectivité et l'économie;
- respecter l'environnement;

- faire appel aux jeunes lorsque c'est possible;
- s'en tenir à un budget réaliste et recourir à des ressources appropriées pour la réalisation desdits projets;
- comporter un début et une fin bien définis, et être mis en œuvre en temps opportun;
- obtenir l'appui écrit de toutes les parties, notamment en ce qui concerne les contributions financières, les appuis non financiers et l'expertise technique;
- être menés au Manitoba ou être bénéfiques à la province;
- comporter un plan d'action concret quant à leur utilisation, leur diffusion ou leur répétition dans l'avenir.

Les demandes d'inscription et de financement non admissibles comprennent :

- les projets aboutissant à l'acquisition d'un savoir-faire privatif détenu exclusivement par le bénéficiaire de la subvention;
- les demandes formulées à des fins de remboursement d'emprunt ou de recouvrement de coût;
- l'achat d'équipement récréatif ou destiné à des terrains de jeux;
- l'achat de biens immobiliers (terrains, bâtiments) ou de véhicules;
- les frais d'administration permanents et les budgets d'exploitation établis;
- les projets qui doivent être mis en œuvre à la suite d'un ordre donné par le gouvernement, comme l'élimination de réseaux de distribution du pétrole, des études et des travaux de remise en état.

Source de revenu

Les revenus du Fonds proviennent d'une taxe pour la protection de l'environnement sur les bouteilles d'alcool en verre et les couches jetables.

Processus

La Direction de la prévention de la pollution de Conservation Manitoba gère le Fonds des innovations de développement durable en collaboration avec les ministères du gouvernement provincial. Le personnel de la Province évalue les demandes de financement de projets en fonction des critères du Fonds. Les évaluations sont compilées et résumées avant d'être présentées au comité consultatif d'examen du Fonds des innovations de développement durable, qui est composé de représentants des ministères provinciaux. Ce comité examine les projets et les évaluations, puis formule des recommandations au ministre de la Conservation en ce qui concerne le financement. Le ministre de la Conservation dispose d'un pouvoir délégué d'approbation pour les projets dont le financement ne dépasse pas 25 000 $. Les projets dont le financement est supérieur à 25 000 $ sont soumis à l'approbation du Conseil du Trésor.

Communication

La promotion du Fonds des innovations de développement durable est assurée par les activités suivantes :

- tables rondes organisées par le gouvernement provincial (présentation d'exposés, etc.);
- page Web de la Direction de la prévention de la pollution (en anglais) – http://www.gov.mb.ca/conservation/pollutionprevention;

- activités communautaires, foires commerciales, expositions;
- annonce par le Ministère des projets financés;
- communiqués de presse;
- remerciements dans les publications, documents imprimés, et annonce des projets financés;
- inscription dans les répertoires de sources de financement;
- bureaux et personnel du gouvernement provincial;
- bouche à oreille.

Une aide financière totalisant 2,96 millions de dollars a été approuvée pour appuyer les catégories admissibles du Fonds, qui comprennent neuf domaines de programmes prioritaires et sept catégories d'attribution générales ciblées. Les catégories d'attribution générales ciblées sont :

- la Brigade des jeunes environnementalistes;
- le Fonds d'action sur le changement climatique du Manitoba;
- le Programme de protection des terrains boisés du Manitoba pour la région du Sud-Ouest, géré par la Société protectrice du patrimoine écologique du Manitoba;
- le Programme d'évaluation des mines abandonnées du Manitoba;
- le Programme de remise en état des mines abandonnées du Manitoba;
- le Fonds pour la réduction du volume des déchets et la prévention de la pollution (RVDPP);
- le Programme de lutte contre la moule zébrée.

Le Fonds d'action sur le changement climatique du Manitoba est géré par le ministère de l'Énergie, des Sciences et de la Technologie et le Programme de remise en état des mines abandonnées du Manitoba par le ministère de l'Industrie, du Commerce et des Mines. Les autres catégories d'attribution générales sont gérées par le ministère de la Conservation.

Au cours de 2002-2003, quarante-neuf nouveaux projets ont été approuvés pour du financement dans les domaines de programmes prioritaires du Fonds, à raison de quelque 1,1 million de dollars. Ces projets comprenaient des initiatives centrées sur les intérêts des Autochtones, les programmes destinés aux jeunes, la formation et l'analyse scientifique. On a consacré 1,7 million de dollars à des projets s'inscrivant dans les sept catégories d'attribution générales, et 93 000 $ ont été alloués à des initiatives reportées de l'exercice précédent. En tout, 2 956 371 $ ont été attribués contre un total de 2 957 000 $ l'année précédente. Un résumé des dépenses relatives aux projets des domaines de programmes prioritaires et des catégories d'attribution générales est présenté dans les pages qui suivent.

DOMAINES DE PROGRAMMES PRIORITAIRES

Écotourisme :

En 2002-2003, un total de 30 310 $ a été consacré à deux projets inscrits dans la catégorie de l'écotourisme. Les projets approuvés dans cette catégorie sont des initiatives ayant trait à la préservation des écosystèmes, à l'éducation du public et aux débouchés économiques par la voie du tourisme, et accordant la priorité aux collectivités rurales et du Nord.

Conservation des écosystèmes :

La somme de 67 300 $ a été consacrée en 2002-2003 à six projets s'inscrivant dans la catégorie de la conservation des écosystèmes. Les objectifs de cette catégorie consistent à conserver les ressources, à préserver et à entretenir les forêts et les écosystèmes urbains, ainsi qu'à remettre en état et à revitaliser les zones détériorées.

Innovation et démonstration de technologie environnementale :

Au cours de l'exercice 2002-2003, la somme totale de 74 000 $ a été consacrée à trois projets appartenant à la catégorie d'innovation et de démonstration de technologie environnementale. Les projets qui s'inscrivent dans cette catégorie comprennent, entre autres, des études de faisabilité, des travaux de recherche et développement de nouveaux produits et procédés, des démonstrations de technologie environnementale et des projets spéciaux tels que des études stratégiques dans divers secteurs industriels.

Environnement et développement communautaire du Nord :

En 2002-2003, on a consacré 84 533 $ à deux projets dans la catégorie de l'environnement et du développement communautaire du Nord. Les projets de cette catégorie reflètent la mise en valeur de l'environnement et les activités de développement économique durable des collectivités du Nord et éloignées, et accordent la priorité aux collectivités autochtones.

Gestion régionale des déchets :

Un total de 23 500 $ a été consacré à la catégorie de la gestion régionale des déchets au cours de l'exercice 2002-2003. Les objectifs de cette catégorie consistent à développer et à améliorer des stations de transfert des déchets en vue de minimiser les risques environnementaux causés par les déchets des décharges.

Pratiques agricoles durables :

Au cours de l'exercice financier 2002-2003, la somme de 307 347,69 $ a été consacrée à six projets de la catégorie des pratiques agricoles durables. Les projets appartenant à cette catégorie comprennent, entre autres, des recherches, des projets de démonstration et des études de faisabilité sur les pratiques agricoles qui protègent l'environnement et qui contribueront à diversifier le secteur agricole du Manitoba.

Développement durable des collectivités :

Au cours de l'exercice financier 2002-2003, la somme de 113 100 $ a été consacrée à cinq projets relevant de la catégorie du développement durable des collectivités. Les projets ayant trait au développement durable des collectivités comprennent les initiatives d'éco-efficacité, la bonne gestion de l'environnement, des mécanismes de renforcement des capacités et la revitalisation des centres-villes, l'accent étant mis sur les partenariats avec les peuples autochtones et les jeunes.

Comprendre notre environnement :

La somme totale de 309 879,47 $ a été consacrée au cours de l'exercice 2002-2003 à dix-huit projets de cette catégorie. Les projets qui s'inscrivent dans cette catégorie sont axés sur

des activités d'éducation et de sensibilisation, de formation ou de recherche, et sur l'organisation de colloques et de forums visant à aider les Manitobains et Manitobaines à prendre des décisions éclairées et à agir dans l'intérêt de l'environnement.

Eau :

Au cours de l'exercice 2002-2003, la somme de 137 700 $ a été consacrée à cinq projets relevant de la catégorie de l'eau. Ces projets comprennent, entre autres, des initiatives de contrôle des espèces aquatiques nuisibles, de bonne gestion du bétail, de protection de la qualité de l'eau, de promotion d'une consommation efficiente et intelligente des ressources hydriques et d'innovation scientifique et technologique dans le développement, les tests et la mise en œuvre de technologies visant à réduire les déchets dans l'eau et à préserver cette ressource.

CATÉGORIES D'ATTRIBUTION GÉNÉRALES

Brigade des jeunes environnementalistes :

Au cours de l'exercice financier 2002-2003, la somme de 200 000 $ a été consacrée à soixante-quinze projets relevant de la Brigade des jeunes environnementalistes et pour financer les frais administratifs de la gestion du Fonds. La Brigade est présente dans différentes régions du Manitoba et soutient des projets concernant la qualité de l'eau, la réduction des déchets, la protection de la flore et de la faune, la restauration et la conservation des milieux naturels et la conservation des espèces sauvages et des habitats naturels.

Fonds d'action sur le changement climatique du Manitoba :

En 2002-2003, la somme de 249 997,57 $ a été accordée à 13 projets par l'intermédiaire du Fonds d'action pour le changement climatique du Manitoba. Les domaines prioritaires du Fonds d'action sur le changement climatique du Manitoba sont l'éducation et la sensibilisation, les effets et l'adaptation, les innovations techniques et l'efficacité énergétique.

Programme de protection des terrains boisés du Manitoba pour la région du Sud-Ouest, géré par la Société protectrice du patrimoine écologique du Manitoba

La somme de 210 870 $ a été versée en 2002-2003 à ce programme géré par la Société protectrice du patrimoine écologique du Manitoba afin de maintenir son niveau actuel de financement une fois échue l'entente Canada-Manitoba. Ce programme a été mis sur pied afin d'encourager les propriétaires fonciers privés du sud-ouest de la province à employer des pratiques de gestion agroforestière et de gestion des terrains boisés qui diversifient les revenus agricoles et qui conservent les habitats naturels.

Programme d'évaluation des mines abandonnées du Manitoba :

Au cours de l'exercice 2002-2003, la somme de 231 652,08 $ a été consacrée par Conservation Manitoba à la réalisation de deux évaluations indépendantes de mines abandonnées et du milieu environnant afin de définir et de mettre au point une stratégie de gestion visant à protéger l'environnement et les résidents.

Programme de remise en état des mines abandonnées du Manitoba :

La somme de 249 599,04 $ a été attribuée au cours de l'exercice 2002-2003 par Industrie, Commerce et Mines Manitoba afin de mettre en œuvre des mesures de remise en état de mines abandonnées dans le nord du Manitoba.

Fonds pour la réduction du volume des déchets et la prévention de la pollution :

Pour l'exercice financier 2002-2003, la somme de 549 831,56 $ a été consacrée à 32 projets financés par le Fonds pour la réduction du volume des déchets et la prévention de la pollution. Les domaines prioritaires du Fonds sont le compostage, la gestion des déchets de construction et de démolition, l'approvisionnement écologique, la réduction du volume des déchets au niveau des collectivités, la gestion intégrée des déchets, le développement des marchés, la prévention de la pollution, la promotion et l'éducation, et le recyclage à l'échelle régionale.

Programme de lutte contre la moule zébrée :

Un total de 23 929,55 $ a été attribué par Conservation Manitoba au cours de l'année financière 2002-2003 pour la mise sur pied d'activités visant à stopper la prolifération de la moule zébrée dans les lacs, les rivières et les ruisseaux manitobains.

Tableau 1 : Résumé des projets financés par le Fonds, par catégories d'attribution générales et domaines de programmes prioritaires

Catégories de projets	Nombre de projets financés en 2002-2003	Sommes attribuées
Domaines de programmes prioritaires		
Écotourisme	2	30,310,00 $
Conservation des écosystèmes	6	67,300,00 $
Innovation et démonstration de technologie environnementale	3	74,000,00 $
Environnement et développement communautaire du Nord	2	84,533,00 $
Gestion régionale des déchets	2	23,500,00 $
Pratiques agricoles durables	6	307,347,69 $
Développement durable des collectivités	5	113,100,00 $
Comprendre notre environnement	18	309,879,47 $
Eau	5	137,700,00 $
Catégories d'attribution générales		
Brigades des jeunes environnementalistes	75	200,000,00 $
Fonds d'action pour le changement climatique du Manitoba	13	249,997,57 $
Programme de protection des terrains boisés du Manitoba pour la région du Sud-Ouest, géré par la Société protectrice du patrimoine écologique du Manitoba [1]	S/O	210,870,00 $
Programme d'évaluation des mines abandonnées du Manitoba	S/O	231,652,08 $
Programme de remise en état des mines abandonnées du Manitoba	S/O	249,599,04 $
Fonds pour la réduction du volume des déchets et la prévention de la pollution	32	549,831,56 $
Programme de lutte contre la moule zébrée	S/O	23,929,55 $
Total – Catégories d'attribution générales	**120**	**1,715,879,80 $**
Total – Domaines de programmes prioritaires	**49**	**1,147,670,16 $**
Initiatives reportées de l'exercice 2001-2002	**6**	**92,767,00 $**
Total général	**175**	**2,956,316,96 $**

[1] Le Programme de protection des terrains boisés du Manitoba pour la région du Sud-Ouest géré par la Société protectrice du patrimoine écologique du Manitoba, le Programme d'évaluation des mines abandonnées du Manitoba, le Programme de remise en état des mines abandonnées du Manitoba et le Programme de lutte contre la moule zébrée soutiennent des initiatives précises en rapport avec ces questions et non les promoteurs de projets.

ECO-TOURISM

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 2

Total Amount Expended: $30,310.00

Project Name	Total Expended
Churchill Provincial Heritage Park Study	$25,000.00
Eco-Adventure Tourism Infrastructure and Cultural Exchange Project	$5,310.00

ECO-TOURISM

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

CHURCHILL PROVINCIAL HERITAGE PARK STUDY

Proponent: Manitoba Conservation, Parks and Natural Areas Branch and Churchill Northern Studies Centre
Date Approved: February 20, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to conduct a study to determine the feasibility of developing a Provincial Heritage Park in the Churchill area, determine the feasibility and resource requirements of protecting and developing the rocket range as a heritage component of the park and develop a conceptual plan for the heritage park. The feasibility study area includes the former Churchill Rocket Range site, present polar bear viewing operations and trails, and the surrounding area.

ECO/ADVENTURE TOURISM INFRASTRUCTURE AND CULTURAL EXCHANGE

Proponent: Northern Soul Wilderness Adventures
Date Approved: March 19, 2003
Total Amount Approved: $5,310.00
Total Amount Expended: $5,310.00

Summary:

A grant of $5,310.00 was approved to increase local awareness regarding the potential for eco-tourism and adventure tourism development. The project involves cleaning up areas close to Bloodvein First Nation and Oxford House First Nation to provide campsites for canoeists and eco-adventurers. The campgrounds will provide an area within the community from which visitors can access community services, meet with the people and take part in cultural exchanges.

ECOSYSTEM CONSERVATION

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 6

Total Amount Expended: $67,300.00

Project Name	Total Expended
Dragonflies (Odanata) in the City of Winnipeg	$25,000.00
Happy Thought School Shelter Belts	$4,000.00
Southwood Green Space Project	$5,000.00
The Assiniboine Forest Project	$10,000.00
The Green Project, Phase III	$20,000.00
Western Prairie Fringed Orchid Conservation Project, Phase II	$3,300.00

ECOSYSTEM CONSERVATION

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

DRAGONFLIES (ODANATA) IN THE CITY OF WINNIPEG

Proponent: City of Winnipeg, Naturalist Services Branch
Date Approved: July 11, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to conduct research on dragonfly populations and the effect of habitat improvement on their numbers. The ultimate goal of this project is to use available habitats within the City of Winnipeg to increase dragonfly populations to a point that they can reduce mosquito populations. Dragonflies are well known as the main predator of mosquitoes and are used as an indicator species for assessing habitat and water quality in a variety of terrains, including wetlands, riparian forests and lakeshores. Dragonflies have a long aquatic larval period before emerging as adults and they require a healthy water habitat for successful breeding.

HAPPY THOUGHT SCHOOL SHELTER BELTS

Proponent: Happy Thought School
Date Approved: February 20, 2003
Total Amount Approved: $4,000.00
Total Amount Expended: $4,000.00

Summary:

A grant of $4,000.00 was approved to continue with a project to beautify the school grounds. A committee is working to improve the shelter and suitability of the grounds for play. This year's phase of the initiative focuses on the front of the school and the playground area. The project includes purchase and planting of trees and shrubs, and construction of brick walls, walkways, benches and garbage containers.

SOUTHWOOD GREEN SPACE PROJECT

Proponent: Southwood Elementary School
Date Approved: March 19, 2003
Total Amount Approved: $5,000.00
Total Amount Expended: $5,000.00

Summary:

A grant of $5,000.00 was approved to create two prairie scene murals depicting the native plants, native birds and butterflies of the region and to construct a series of garden plots around the school building's exterior. The garden plots will be landscaped areas that include tree, shrubs, wild flowers, and ornamental prairie grasses. Mulch will cover as much area as possible for moisture protection and weed control. The project will link with the Science Curriculum and classes will be given responsibility to plan, develop, prepare and maintain the garden area and carry out their mural ideas. This is a collaborative project between students, teachers, parents, and community members.

THE ASSINIBOINE FOREST PROJECT

Proponent: Charleswood Rotary Club
Date Approved: March 19, 2003
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to preserve 280 hectares of urban aspen parkland while providing year round recreation. The Charleswood Rotary Club intends to continue to enhance the area and increase the understanding of the importance of preservation of natural habitat to the many visitors who visit the Assiniboine Forest.

THE GREEN PROJECT, PHASE III

Proponent: The Green Project Committee
Date Approved: February 20, 2003
Total Amount Approved: $20,000.00
Total Amount Expended: $20,000.00

Summary:

A grant of $20,000.00 was approved to assist The Green Project Committee (a sub-committee of the Flin Flon and District Environmental Council in partnership with the Flin Flon School Division) to implement the next phase of their community-based environmental enhancement project to restore and rehabilitate areas degraded by past industrial activities in and around Flin Flon. The goal of this initiative is to rehabilitate five hectares by spreading crushed limestone on these areas to counteract soil acidity and allow a natural generation of vegetation cover, as well as create suitable habitat for wildlife. Project activities are carried out by residents, community volunteers, students and aboriginal communities, in cooperation with the Green Project Committee.

WESTERN PRAIRIE FRINGED ORCHID CONSERVATION PROJECT, PHASE II

Proponent: Manitoba Orchid Society
Date Approved: July 11, 2002
Total Amount Approved: $3,300.00
Total Amount Expended: $3,300.00

Summary:

A grant of $3,300.00 was approved to conduct the final phase of a research project to identify the pollination mechanism and facilitate improved pollination and seed set in the Western Prairie Fringed Orchid to ensure the survival of the population. This orchid is native to Manitoba and is found in several areas of remnant tall grass prairie in the Vita and Tolstoi areas of southeastern Manitoba.

ENVIRONMENTAL TECHNOLOGY INNOVATION AND DEMONSTRATION

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 3

Total Amount Expended: $74,000.00

Project Name	Total Expended
Community Green Roof Project	$25,000.00
Fertigation Management Using Confiscated Hydroponic Equipment	$24,000.00
Green Kids All Weather Bio Bus	$25,000.00

ENVIRONMENTAL TECHNOLOGY INNOVATION AND DEMONSTRATION

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

COMMUNITY GREEN ROOF PROJECT

Proponent: The John Howard Society
Date Approved: February 20, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to assist in creating a new green space on the roof of the Justice Resource Centre in Winnipeg's inner city. The proponent was unable to proceed with the project as intended and the project file was subsequently closed with no funding being issued.

FERTIGATION MANAGEMENT USING CONFISCATED HYDROPONIC EQUIPMENT

Proponent: Growing Prospects Inc.
Date Approved: October 28, 2002
Total Amount Approved: $24,000.00
Total Amount Expended: $24,000.00

Summary:

A grant of $24,000.00 was approved for a pilot program to a computer controlled fertilization process to grow herbs in a greenhouse at the Forks in Winnipeg. The project makes use of confiscated hydroponic equipment donated by the Winnipeg Police and RCMP. Growing Prospects staff will construct and learn how to use the fertigation manager, then develop a curriculum to train other workers. Part of the pilot program will be to research growing Stevia, a natural sweetener that can be used to replace sugar and fight diabetes in the North. The project will employ unemployed youth and inner-city Aboriginal residents, who are participating in a work placement program.

GREEN KIDS ALL WEATHER BIO BUS

Proponent: Green Kids Inc.
Date Approved: October 28, 2002
Total Amount Approved; $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to design and develop a Straight Vegetable Oil (SVO) diesel motor bus (Bio Bus) to work as a reliable, economical mode of transportation year round in Canadian prairie conditions. Solar panels were used on the roof to generate the electrical systems from sunlight thus adding to the educational and practical mandate of the bus. The bus transports the Green Kids on their annual school tour and serves as a promotional and educational tool. Data are collected regarding engine performance, fuel efficiency, economic benefits, environmental benefits (emissions reduction), and reliability during all-season use.

NORTHERN COMMUNITY DEVELOPMENT AND ENVIRONMENTAL ISSUES

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 2

Total Amount Expended: $84,533.00

Project Name	Total Expended
Culturally Responsive Science in the Middle and Senior Years in a First Nation Community	$34,533.00
Northern Forest Diversification Centre	$50,000.00

NORTHERN COMMUNITY DEVELOPMENT AND ENVIRONMENTAL ISSUES

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

CULTURALLY RESPONSIVE SCIENCE IN THE MIDDLE AND SENIOR YEARS IN A FIRST NATION COMMUNITY

Proponent: University of Winnipeg and Education Authority of the Nisichawayasihk Cree Nation
Date Approved: October 28, 2003
Total Amount Approved: $34,533.00
Total Amount Expended: $34,533.00

Summary:

A grant of $34,533.00 was approved to develop and implement culturally relevant and responsive science units for Grade 4, Grade 5, Grade 7 and Senior 2 students in the Otetiskiwin School on Nisichawayasihk Cree Nation (NCN). Teachers and community members are collaborating on the creation of the science units, thus integrating the science curriculum with local ecological knowledge. The intent of the project is to increase the motivation and achievement of Cree students in science and more generally in school by creating culturally relevant learning experiences. Equally important to student achievement is the expected contribution to the community. By developing a population of local youth who are informed about the local traditional knowledge and the scientific methodologies required to establish long-term ecological monitoring programs, the capacity of the community to make informed decisions regarding the local environment will be enhanced.

NORTHERN FOREST DIVERSIFICATION CENTRE

Proponent: Keewatin Community College
Date Approved: February 20, 2003
Total Amount Approved: $50,000.00
Total Amount Expended: $50,000.00

Summary:

A grant of $50,000.00 was approved to support the continuation of the Northern Forest Diversification Centre demonstration project. The centre links the growing demand for wild, natural, organic products with the need to create sustainable economic development opportunities for local residents in remote communities. The project's focus is on the creation of micro-businesses and assisting participants in increasing incomes and self-sufficiency through development of inventories, harvesting, processing and marketing of non-timber products. The project targets unemployed or under-employed residents of remote northern communities, with the majority of program participants being Aboriginal.

REGIONAL WASTE MANAGEMENT

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 2

Total Amount Expended: $23,500.00

Project Name	Total Expended
Roblin Cartwright Waste Transfer Station	$15,000.00
R. M. of St. Laurent Recycling Project	$8,500.00

REGIONAL WASTE MANAGEMENT

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

ROBLIN CARTWRIGHT WASTE TRANSFER STATION

Proponent: Rural Municipality of Roblin and Village of Cartwright
Date Approved: July 11, 2002
Total Amount Approved: $15,000.00
Total Amount Expended: $15,000.00

Summary:

A grant of $15,000.00 was approved to develop a waste transfer facility to collect wastes generated by two municipal communities for disposal at the landfill in the Rural Municipality of Argyle. Collection areas will be established for recyclables, appliances, tires, bulky metals, trees and compost. The site will be fenced and a shelterbelt will be planted.

R.M. OF ST. LAURENT RECYCLING PROJECT

Proponent: Rural Municipality of St. Laurent
Date Approved: July 11, 2002
Total Amount Approved: $8,500.00
Total Amount Expended: $8,500.00

Summary:

A grant of $8,500.00 was approved to enhance the waste transfer station's operations and upgrade the site. The enhancement is expected to facilitate solid waste collection and transportation and allow the municipality to minimize the risk from landfill waste. Upgrades included the installation of a utility connection to provide heat and light in the building.

SUSTAINABLE AGRICULTURAL PRACTICES

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 6

Total Amount Expended: $307,347.69

Project Name	Total Expended
Brush Encroachment and Weed Control Using Goats	$25,000.00
Hog Manure Application Effects on Oat Residue Decomposition, Phase II	$13,320.00
Livestock Manure Phosphorus Expert Committee	$2,027.69
Operation CleanFarm	$200,000.00
Research and Development of Non-Chemical Insect Controls in Organic and Non-Organic Forage Crops	$17,000.00
Riparian Health Initiative	$50,000.00

SUSTAINABLE AGRICULTURAL PRACTICES

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

BRUSH ENCROACHMENT AND WEED CONTROL USING GOATS

Proponent: Manitoba Goat Association
Date Approved: July 11, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to conduct a research and demonstration project regarding the feasibility of using large goatherds as an environmentally friendly method of brush removal and prairie restoration in Manitoba. The project is expected to demonstrate that with proper management, animals can be used in place of chemicals, mechanical brush control or burning. Goats are focused browsers, leaving native grasses relatively untouched. Therefore, this project is intended to demonstrate that goats can be successfully grazed along with cattle to control brush encroachment and weeds, and provide more grass for the cattle. As well, removal of brush understory and other fire fuel sources is expected to lower the risk of damaging wild fires that are recognized as a serious threat in this area.

HOG MANURE APPLICATION EFFECTS ON OAT RESIDUE DECOMPOSITION, PHASE II

Proponent: University of Manitoba, Department of Soil Sciences
Date Approved: July 11, 2002
Total Amount Approved: $13,320.00
Total Amount Expended: $13,320.00

Summary:

A grant of $13,320.00 was approved to conduct a research study to determine the effects of liquid hog manure on oat residue decomposition, further to data that were collected in the field. Environmental and field conditions cannot be held completely constant, therefore, a microcosm study was needed to allow for more detailed analysis of manure nitrogen crop residue carbon dynamics. The study was implemented to simulate residue incorporation and surface-retained residues and quantify the resulting difference in the rate of oat crop residue decomposition. The effects of residue placement, treatments for examining manure application rate effects on residue decomposition rates were also included. The study consisted of 80 treatment and five water blank microcosms.

LIVESTOCK MANURE PHOSPHORUS EXPERT COMMITTEE

Proponent: Manitoba Conservation, Environmental Livestock Program
Date Approved: January 9, 2003
Total Amount Approved: $18,000.00
Total Amount Expended: $ 2,027.69

Summary:

A grant of $18,000.00 was approved to support the Livestock Manure Phosphorus Expert Committee. With the expansion of Manitoba's livestock industry over recent years and with the distinct possibility of continued expansion, there is concern about the environmental impact and sustainability of the industry, in particular about the potential exports of phosphorus from livestock manure to surface water. This committee has the mandate to carry on a scientific analysis of the pathways of phosphorus transport from agricultural fields to surface water bodies. The goals of the committee are to estimate the likely extent of phosphorus pollution from livestock production to Manitoba's surface water, and reach conclusions on the need and form of regulatory or other approaches for managing livestock manure phosphorus.

OPERATION CLEANFARM

Proponent: CropLife Canada
Date Approved: March 25, 2003
Total Amount Approved: $200,000.00
Total Amount Expended: $200,000.00

Summary:

A grant of $200,000.00 was approved for Operation CleanFarm, a two-year demonstration project to collect and dispose of obsolete or unwanted farm pesticides and their containers. In undertaking this initiative, information will be gathered to ensure proper management in future. An estimated 100,000 to 125,000 litres/kilograms of unwanted or obsolete pesticides is being stored on farms throughout Manitoba, posing a potential risk to the environment and human health as the containers age and degrade. CropLife Canada in cooperation with Manitoba Conservation, Manitoba Agriculture and Food, Canadian Association of Agri-Retailers, Manitoba Weed Supervisors Association, Prairie Farm Rehabilitation Administration, Association of Manitoba Municipalities and the Keystone Agricultural Producers will be responsible for the planning, execution and evaluation of the project.

RESEARCH AND DEVELOPMENT OF NON-CHEMICAL INSECT CONTROLS IN ORGANIC AND NON-ORGANIC FORAGE CROPS

Proponent: Organic Alternatives Inc.
Date Approved: July 11, 2002
Total Amount Approved: $17,000.00
Total Amount Expended: $17,000.00

Summary:

A grant of $17,000.00 was approved to conduct a research project on the effectiveness of a non-selective mechanical method that will remove problem insects from organic and non-organic forage crops. The design of a prototype crop sweeper was enhanced and modified then scientifically tested. The project intended to demonstrate on a 50-acre test crop that thousands of problem insects could be removed without the use of chemical pesticides. The comparison to other insect control methods took place on an adjacent 70-acre field, on which insecticide was used.

RIPARIAN HEALTH INITIATIVE

Proponent: Manitoba Cattle Producers Association
Date Approved: September 3, 2002
Total Amount Approved: $50,000.00
Total Amount Expended: $50,000.00

Summary:

A grant of $50,000.0 was approved to support stewardship initiatives to assist livestock producers adopt grazing and livestock watering practices that enhance riparian areas and surface water quality; and enhance riparian habitat for fish and wildlife. The project involves cost-sharing stewardship projects proposed by cooperating landowners with the producers being responsible for establishing and maintaining the projects. The intent is to complete 75 managed grazing/off site water and buffer strip establishment projects per year over a three-year period; establish a provincial Riparian Health Council to improve coordination and integration of stewardship initiatives; improve overall effectiveness, efficiency and relevance of existing programs; and create a framework that leads to long-term coordination and delivery of riparian stewardship programs.

SUSTAINABLE COMMUNITY DEVELOPMENT

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 5

Total Amount Expended: $113,100.00

Project Name	Total Expended
Cool Jobs	$20,000.00
Gaa Bi Ombaashid Migizi – Soaring Eagle Project, Phase II	$18,100.00
Greening West Broadway	$15,000.00
Peguis First Nation Forest Harvesting	$25,000.00
Socioeconomic Survey of Commercial Fishers	$35,000.00

SUSTAINABLE COMMUNITY DEVELOPMENT

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

COOL JOBS

Proponent: Cool Jobs Inc.
Date Approved: January 9, 2003
Total Amount Approved: $20,000.00
Total Amount Expended: $20,000.00

Summary:

A grant of $20,000.00 was approved to support aboriginal youth programming. Cool Jobs Inc.'s mandate is to encourage Aboriginal youth to pursue a "cool job", by showcasing Aboriginal role models employed in non-traditional industries, and providing them with information about the education and training needed for these jobs. The objective of the project is to produce 13 videos that will be broadcast across Canada on the Aboriginal Peoples Network, marketed to Saskatchewan Cable Network, Knowledge TV and Careers TV, and be made available for schools for career fairs, life skills courses and in career counselor offices.

GAA BI OMBAASHID MIGIZI – SOARING EAGLE PROJECT, PHASE II

Proponent: Boreal Forest Network
Date Approved: February 20, 2003
Total Amount Approved: $18,100.00
Total Amount Expended: $18,100.00

Summary:

A grant of $18,100.00 was approved to implement a six-week community-based environmental program for Aboriginal youth from communities in northeastern Manitoba. The goal is to develop a new approach to science education for Aboriginal students by developing a program to be delivered by scientists and Native Elders within the traditional territory of Hollow Water First Nation, and by incorporating both scientific and western perspectives on the environment. The long-term goal is to seek accreditation for this program from a secondary or post-secondary institution in order to broaden the geographic scope of the program and provide Aboriginal students with a recognized certificate and credits for successfully completing the program. Youth are expected to gain an understanding of environmental problems and solutions facing Aboriginal communities in Manitoba, scientific literacy in the areas of impact assessment, monitoring and natural resource management, and the role of both Traditional Ecological Knowledge and science in local environmental decision making.

GREENING WEST BROADWAY

Proponent: West Broadway Development Corporation
Date Approved: March 19, 2003
Total Amount Approved: $15,000.00
Total Amount Expended: $15,000.00

Summary:

A grant of $15,000.00 was approved to support the greening activities within the West Broadway area. The greening activities include maintenance of existing gardens, development of new gardens, treebanding, tree care, and ensuring the continued maintenance of native plantings in Spence Park. The project intends to increase functional and productive green space by reclaiming and renovating vacant lots and other open space to contribute to the physical, mental, emotional and social health of the people in this community and to provide critical habitat for plants and animals.

PEGUIS FIRST NATION FOREST HARVESTING

Proponent: Peguis First Nation
Date Approved: January 9, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to recruit and train 18 participants between 18- and 45-years-of-age in sustainable forest harvesting. Program activities included classroom presentations, field research and hands on work experience. The core training components and activities will include elders historical perspective, logging safety, best management practices and aesthetics, first aid/CPR, conventional harvesting techniques, business concept and field research. This initiative is intended to help develop capacity within the community and to prepare individuals for the anticipated employment opportunities in the forest sector, thus contributing to a more diverse and sustainable local economy.

SOCIOECONOMIC SURVEY OF COMMERCIAL FISHERS

Proponent: Freshwater Fish Marketing Corporation (FFMC)
Date Approved: March 18, 2003
Total Amount Approved: $35,000.00
Total Amount Expended: $35,000.00

Summary:

A grant of $35,000.00 was approved to assist with comprehensive survey to determine the demographics, opinions and attitudes of commercial fishers in Manitoba. This survey is intended to provide up-to-date socioeconomic information; identify issues and concerns for future policy development; and enhance communication. Many of Manitoba's fishers live in remote northern communities and are Aboriginal. Due to language and literacy barriers and lack of telephone services, face-to-face interviews will be conducted.

UNDERSTANDING OUR ENVIRONMENT

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 18

Total Amount Expended: $309,879.47

Project Name	Total Expended
2003 Manitoba Envirothon – Agricultural Land Conservation	$10,000.00
Assessing the Application of Alternative Transportation Fuels	$8,500.00
Climate Change Promotional Campaign	$72,482.47
Conservation Strategies in a North American Bear Viewing Area, Phase II	$12,000.00
Creation of Community Economic Development Guidelines for Manitoba First Nations	$10,000.00
Demonstration Yellow Perch Aquaculture Project	$11,385.00
First Nations Junior Rangers Program	$22,000.00
GLOBE in Manitoba	$18,833.00
Habitat use of northern prairie skink in southwestern Manitoba	$10,970.00
Integrating Multiple Forest Values in Sustainable Forest Management: Database Development and Management, Phase II	$25,000.00
Making Manitoba Food Secure	$7,500.00

Project Name	Total Expended
Monarchs of the Tall Grass Prairie	$24,899.00
Mosquito Surveillance in Rural Manitoba as a Component to Provincial Planning for West Nile Virus	$24,600.00
Rocky Creek Fisheries Project	$6,950.00
The Odanata of Canada: Biodiversity, Conservation and Public Education Workshop	$1,500.00
Whiteshell Trappers Museum Renovation	$7,260.00
Woodland Caribou Management and Research Strategy for Eastern Manitoba, Phase II	$25,000.00
Working Together to Sustain Winnipeg's Riparian Forests, Phase II	$11,000.00

UNDERSTANDING OUR ENVIRONMENT

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

2003 MANITOBA ENVIROTHON – AGRICULTURAL LAND CONSERVATION

Proponent: Manitoba Forestry Association Inc.
Date Approved: February 20, 2003
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved for the Envirothon for Manitoba high school students in the Swan Valley area during the spring of 2003. Envirothon is an Olympic style competition where students are exposed to hands-on environmental education activities addressing current and up-to-date sustainable development related issues. The main theme for the 2003 event is "Agricultural Land Conservation" where the students become familiar with the issues, problems and solutions associated with agricultural land conservation and preservation, in addition to other environmental issues such as forests, soils, aquatics and wildlife. The project offers students an opportunity to apply their knowledge in an integrated fashion and is intended to educate and increase students' knowledge and awareness on various environmental topics and current issues dealing with sustainability.

ASSESSING THE APPLICATION OF ALTERNATIVE TRANSPORTATION FUELS

Proponent: University of Manitoba, Natural Resources Institute
Date Approved: February 20, 2003
Total Amount Approved: $8,500.00
Total Amount Expended: $8,500.00

Summary:

A grant of $8,500.00 was approved to assess the implementation of alternative fuels in fleet vehicles within the Red River Valley Region (both the Canadian and U.S. portions) in order to promote increased use of alternative fuels within the region. The research is intended to provide an analysis of this complex subject to enable informed decisions about the use of alternative fuels in vehicle fleets. Increasing the use of alternative fuels will help to ensure clear air, develop economic opportunities and make the Red River Valley Region a leader in the alternative fuel industry. The research will focus on fuels that are readily available and technically feasible for the study area including ethanol, natural gas, propane, electricity and biodiesel.

CLIMATE CHANGE PROMOTIONAL CAMPAIGN

Proponent: Manitoba Energy, Science and Technology
Date Approved: March 25, 2003
Total Amount Approved: $100,000.00
Total Amount Expended: $ 72,482.47

Summary:

A grant of $100,000.00 was approved for television and print advertising on climate change and actions being taken to address the issue. The campaign also made available information in print and on the Take Action on Climate Change Website.

CONSERVATION STRATEGIES IN A NORTH AMERICAN BEAR VIEWING AREA, PHASE II

Proponent: University of Waterloo, Department of Recreation and Leisure Studies
Date Approved: October 28, 2002
Total Amount Approved: $12,000.00
Total Amount Expended: $12,000.00

Summary:

A grant of $12,000.00 was approved to continue a four-year social scientific research study into human-bear interactions in the Cape Churchill Wildlife Management Area (CCWMA). The goal of the research is to assist agencies such as Manitoba Conservation with the regulations that will help to maintain quality polar bear viewing opportunities in Churchill, while ensuring protection for the bears. This phase of the research project will focus on the motivations and attitudes of tourist to the area.

CREATION OF COMMUNITY ECONOMIC DEVELOPMENT GUIDELINES FOR MANITOBA FIRST NATIONS

Proponent: University of Manitoba, Natural Resources Institute
Date Approved: January 9, 2003
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to use local natural resources and local traditional knowledge to develop guidelines for economic development within the seven communities that constitute the Interlake Tribal Council First Nations. The research will identify strategies to allow Aboriginal communities to overcome obstacles, create effective partnerships and develop local plans for economic development.

DEMONSTRATION YELLOW PERCH AQUACULTURE PROJECT

Proponent: Northern Lights Fish Farm
Date Approved: February 20, 2003
Total Amount Approved: $11,385.00
Total Amount Expended: $11,385.00

Summary:

A grant of $11,385.00 was approved to conduct a two-year pilot project to demonstrate a yellow perch aquaculture in the Swan Valley and provide an educational opportunity for students from the Swan Valley Regional Secondary School. The project will focus on the culture of yellow perch in an intensive tank recirculation tank system and an intensive pond/dugout culture. As well, production scale field trials will be conducted. The perch will be captured both from wild stocks and from the University of Manitoba they have been cultured successfully. The fingerlings will be grown to both a marketable size as well as a mature stage and the mature fish will be used as broodstock to replenish the cultured and natural stocks.

FIRST NATIONS JUNIOR RANGERS PROGRAM

Proponent: First Nation Limited Partnership
Date Approved: January 9, 2003
Total Amount Approved: $22,000.00
Total Amount Expended: $22,000.00

Summary:

A grant of $22,000.00 was approved to provide an opportunity, through the Junior Rangers Program, for First Nations' high school students to increase their knowledge of the land and its resources. This program integrates practical work experiences with outdoor and classroom teachings from Elders, researchers, government and industry professionals and contractors. Students are chosen at the community level based on their academic records and interest in environmental and natural resource issues. The 2003 program included a symposium in Winnipeg to develop an action plan for the Junior Rangers program.

GLOBE IN MANITOBA

Proponent: Manitoba Education and Youth and Science Teachers Association of Manitoba
Date Approved: October 28, 2002
Total Amount Approved: $18,833.00
Total Amount Expended: $18,833.00

Summary:

A grant of $18,833.00 was approved for a pilot project to implement components of the GLOBE Program into selected Manitoba schools and to generate local expertise in the program. The GLOBE Program is a hands-on international science and education program, designed to help students develop specific science skills as well as expose them to technology and data that play an important role in monitoring local and global changes. The students will learn about decision-making processes important for land-use management and the overall goal of sustainable development.

HABITAT USE OF NORTHERN PRAIRIE SKINK IN SOUTHWESTERN MANITOBA

Proponent: University of Manitoba, Natural Resources Institute
Date Approved: February 20, 2003
Total Amount Approved: $10,970.00
Total Amount Expended: $10,970.00

Summary:

A grant of $10,970.00 was approved to conduct a two-year research project into the habitat of the northern prairie skink, a small cylindrical lizard, found in the mixed grass prairie of southwestern Manitoba. The northern prairie skink is considered a species of "special concern" federally, and provincially as a "vulnerable" species. There is little known about this species of skink and management plans currently do not exist. The research is intended to help determine the skink's resource requirements, which will assist in developing recommendations for the species and its related habitat. The potential to use this particular skink as an indicator species for mixed-grass prairies will also be evaluated.

INTEGRATING MULTIPLE FOREST VALUES IN SUSTAINABLE FOREST MANAGEMENT: DATABASE DEVELOPMENT AND MANAGEMENT, PHASE II

Proponent: University of Manitoba, Health Leisure and Human Performance Institute and Natural Resources Institute
Date Approved: February 20, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to continue with the development of an integrated digital database of Manitoba's forest resources and produce an ecosite scale map of the Province of Manitoba. The intent of this initiative is to develop a tool for developing integrated sustainable forest management plans, as well as to map, model or manage on an ecosystem basis to ensure sustainable development and protection of multiple values. This is the second year of a three-year project.

MAKING MANITOBA FOOD SECURE

Proponent: Canadian Centre for Policy Alternatives – Manitoba
Date Approved: January 9, 2003
Total Amount Approved: $7,500.00
Total Amount Expended: $7,500.00

Summary:

A grant of $7,500.00 was approved to host a two-day conference to bring various organizations and individuals together to share knowledge of and make connections between different aspects of food security. The conference focused on local organic agriculture, included a public feast of organic, locally produced food and identified and evaluated solutions for food insecurity based on the connections between farming, health, poverty and sustainability.

MONARCHS OF THE TALL GRASS PRAIRIE

Proponent: Living Prairie Museum
Date Approved: October 28, 2002
Total Amount Approved: $24,899.00
Total Amount Expended: $24,899.00

Summary:

A grant of $24,899.00 was approved to create a travelling exhibit to showcase the role of butterflies in the health and sustainability of the Tall Grass Prairie. The project focused on the Monarch butterfly and entailed the creation of butterfly teaching gardens, insect rearing displays, insect life cycles costumes, storyboards, a display, electronic media presentation and a Manitoba Butterfly website. The travelling exhibit will target schools and environmental groups throughout Manitoba, Canada and northern United States.

MOSQUITO SURVEILLANCE IN RURAL MANITOBA AS A COMPONENT TO PROVINCIAL PLANNING FOR WEST NILE VIRUS

Proponent: University of Winnipeg, Department of Biology
Date Approved: July 11, 2002
Total Amount Approved: $24,600.00
Total Amount Expended: $24,600.00

Summary:

A grant of $24,600.00 was approved to conduct a mosquito surveillance program in rural Manitoba for possible vectors of West Nile Virus (WNV). This project is as a component of the Province's initiative, led by Manitoba Health. The project provided information about population densities, vector potential and potential breeding areas of the mosquito types that are implicated as likely vectors of WNV in rural Manitoba. The project is intended to expand knowledge of these habitats, their geographical extent and proximity to human populations. Control efforts can then be targeted more effectively.

ROCKY CREEK FISHERIES PROJECT

Proponent: Rocky Creek Fisheries Committee
Date Approved: March 19, 2003
Total Amount Approved: $6,950.00
Total Amount Expended: $6,950.00

Summary:

A grant of $6,950.00 was approved to conduct a two-year detailed study on fish stocks and movements in the Rocky Creek Fishway within the Reader/Root Wetland Complex. The Reader/Root Complex, northwest of The Pas, is part of the Saskeram Wildlife Management Area that was established as partial mitigation to offset habitat losses in the Saskatchewan River Delta (SRD) due to the Grand Rapids hydroelectric development. The study is expected to increase understanding of the fish living within the SRD, and assist in development of management actions that benefit all components of this larger wetland ecosystem.

THE ODANATA OF CANADA: BIODIVERSITY, CONSERVATION AND PUBLIC AWARENESS WORKSHOP

Proponent: Manitoba Conservation, Wildlife and Ecosystem Protection Branch
Date Approved: October 28, 2002
Total Amount Approved: $1,500.00
Total Amount Expended: $1,500.00

Summary:

A grant of $1,500.00 was approved to assist with a workshop on dragonflies. The workshop was one of the items in the workplan for the 2005 national general status report and the national recovery-working group. The workshop brought together specialists interested in biodiversity, conservation and public awareness of the Odanada of Canada; initiated development of a formal list of the dragonflies of Canada; and identified the status of each dragonfly and damselfly in Canada.

WHITESHELL TRAPPERS MUSEUM RENOVATION

Proponent: Whiteshell Trappers Fur Council and Manitoba Trappers Association
Date Approved: October 28, 2002
Total Amount Approved: $7,260.00
Total Amount Expended: $7,260.00

Summary:

A grant of $7,260.00 was approved to develop an authentic trappers cabin exhibit onto the existing trappers' museum in the Alf Hole Goose Sanctuary. The exhibit is to include an education program emphasizing the contribution of the fur industry to Manitoba's history and development as a province.

WOODLAND CARIBOU MANAGEMENT AND RESEARCH STRATEGY FOR EASTERN MANITOBA, PHASE II

Proponent: Manitoba Model Forest Inc.
Date Approved: February 20, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved for continuation of a project to gather data and develop guidelines on Manitoba's northerly caribou populations ranging from north of the Wanipigow River, including the Atikaki/Berens range. Woodland Caribou are a "Threatened Species" and are highly susceptible to human caused disturbance. The initiative is intended to provide knowledge of woodland caribou herd locations and habitat areas, which will help in regional land planning and in the development of regional woodland caribou management plans.

WORKING TOGETHER TO SUSTAIN WINNIPEG'S RIPARIAN FORESTS, PHASE II

Proponent: University of Manitoba, Botany Department
Date Approved: July 11, 2002
Total Amount Approved: $11,000.00
Total Amount Expended: $11,000.00

Summary:

A grant of $11,000.00 was approved to conduct Phase II of a two-year project to document and expand on the knowledge base surrounding urban river-bottom or riparian forests in and around the City of Winnipeg. In Phase I, information was gathered about urban forest decline and recommendations to facilitate forest conservation and restoration were drafted. In Phase II, recommendations to help reduce the impacts of the surrounding land use on these forest ecosystems will be developed.

WATER

PROJECTS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 5

Total Amount Expended: $137,700.00

Project Name	Total Expended
Headwater Storage Project	$10,000.00
Killarney Lake Aeration Project	$25,000.00
Rural Municipality of Woodlands Water Management Strategy	$18,500.00
Studies on the Occurrence and Cause of Nuisance Algae Growth in Whiteshell Lakes, Phase II	$31,600.00
Water Use Monitoring and Water Efficiency Project	$52,600.00

WATER

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

HEADWATER STORAGE PROJECT

Proponent: Little Saskatchewan River Conservation District
Date Approved: January 9, 2003
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to construct headwater storage facilities to increase farm productivity, reduce flooding and maintain a steady water supply. Landowners in lower lands of watersheds receive more water than they can accommodate. Headwater storage systems are designed to store water in spring to prevent flooding and then release a steady supply of water in late summer when it is most needed.

KILLARNEY LAKE AERATION PROJECT

Proponent: Town of Killarney and Killarney Lake Water Quality Committee
Date Approved: July 11, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to assist the Town of Killarney, in partnership with the Killarney Lake Water Quality Committee, with methods to reduce or eliminate the use of copper sulphate to control algae blooms in the swimming area. The goal of this project is to improve the water quality of the lake and create a better swimming area for tourism, while reducing the use of chemicals. The proponent was unable to proceed with the project as intended and the project file was subsequently closed with no funding being issued.

RURAL MUNICIPALITY OF WOODLANDS WATER MANAGEMENT STRATEGY

Proponent: Assiniboine Community College and Rural Municipality of Woodlands
Date Approved: March 19, 2003
Total Amount Approved: $18,500.00
Total Amount Expended: $18,500.00

Summary:

A grant of $18,500.00 was approved to support a community process to find solutions to drainage problems in the municipality. Improper drainage is causing flooding and therefore failed production. The community college and municipality have been working on a strategy to create awareness of the problem and come up with environmentally viable solutions such as water retention strategies using natural basins to hold water. The project will involve capacity building and ownership of potential solutions through community wide discussion and implementation. The data will be used to formulate holistic water management strategies that are agreed upon by the landowners and that complement water-use regulations.

STUDIES ON THE OCCURRENCE AND CAUSE OF NUISANCE ALGAE GROWTH IN WHITESHELL LAKES, PHASE II

Proponent: University of Manitoba, Delta Marsh Field Station
Date Approved: March 18, 2003
Total Amount Approved: $31,600.00
Total Amount Expended: $31,600.00

Summary:

A grant of $31,600.00 was approved to undertake the second phase of a research study to determine how to control the coarse "blue-black algae" called *Plectonema wollei*, found in Betula and White Lakes in Whiteshell Provincial Park. The research will determine the extent to which blue-black algae has spread, the rate of spreading, the composition of the algae, the time over which the algae has occurred, characteristics of the watershed and chemical conditions that favour its growth. This invasive algae imparts a distinct earthy taste and odour to water. Research indicates the algae can secrete neurotoxins that pose a risk to human and animal health.

WATER USE MONITORING AND WATER EFFICIENCY PROJECT

Proponent: Rural Municipality of St. Andrews
Date Approved: July 20, 2002
Total Amount Approved: $52,600.00
Total Amount Expended: $52,600.00

Summary:

A grant of $52,600.00 was approved to conduct a research, monitoring and demonstration project of water use in up to forty homes within the municipality. Through metering, monitoring and data collection on water usage, the project intends to gather information that will be used to raise awareness within the community on increased water efficiency and extend the life of septic fields. The project will determine current water use in each of the homes and measure the difference when water saving dual flush toilets and water efficient showerheads are installed.

BROAD ALLOCATIONS

PROGRAMS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Broad Allocations: 7

Total Amount Expended: $1,715,879.80

Project Name	Total Expended
Environmental Youth Corps (EYC)	$200,000.00
Manitoba Climate Change Action Fund (MCCAF)	$249,997.57
Manitoba Habitat Heritage Corporation Southwest (Agro) Woodlot Program	$210,870.00
Orphan Mine Site Assessment Program	$231,652.08
Orphan Mine Site Rehabilitation Program	$249,599.04
Waste Reduction and Pollution Prevention (WRAPP) Fund	$549,831.56
Zebra Mussel Program	$23,929.55

BROAD ALLOCATIONS

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2002/2003 FISCAL YEAR

ENVIRONMENTAL YOUTH CORPS

Managing Department: Manitoba Conservation, Pollution Prevention Branch
Date Approved: 2002/2003 Estimates Review Minute
Total Amount Approved: $200,000.00
Total Amount Expended: $200,000.00

Summary:

The Environmental Youth Corps (EYC) has provided Manitoba's young people with an opportunity to prepare for the environmental challenges of tomorrow by helping them gain valuable education and experience today. EYC encourages youth to volunteer within their community for projects to improve and protect Manitoba's environment. The EYC program allows youth the opportunity to be involved in a variety of environmental activities that may otherwise not occur. The EYC program has demonstrated the government's commitment of increasing the opportunities for young people to be involved in environment-related activities, and to further the commitment of environmental protection and education for youth.

Environmental projects eligible for funding to a maximum of $5,000.00 include (but are not restricted to): water quality, waste minimization (recycling, composting, etc.), protection of flora and fauna, rehabilitation and conservation of the natural environment, wildlife conservation and habitat preservation.

EYC SUMMARY

Total Allocation for 2002/2003	**$200,000.00**
Applications Processed	105
Applications Approved	75
Applications Deferred	6
Applications Declined	22
Applications Withdrawn	2
Number of Youth Involved	5,001
Total Amount for Grants Approved	$186,152.00
Total Amount for Grants Expended	$185,616.92
Administration Costs (travel, printing, promotion, Coordinator's salary)	$ 14,383.08
Total Amount Expended	**$200,000.00**

Brief descriptions of the 75 projects approved under the EYC program during the 2002/2003 fiscal year are as follows:

RED RIVER REGION (WINNIPEG)

Collège Jeanne-Sauvé involved 600 youth in the school's "Dakota Forest Revitalization Project". The youth were provided an opportunity to develop a basic understanding of the forest ecosystem in their own schoolyard as well as contribute to its revitalization and well-being. This involved cleaning up and restoring areas to native vegetation and educating community residents about the oak forest community and the surrounding oak/aspen and prairie meadow communities through public awareness campaigns and community involvement. *Approved $3,440.00.*

Dufferin School Parent Council involved 16 to 19 youth in a community garden project. Youth participated in planting trees as well as watering and weeding the community garden that was created in the schoolyard. *Approved $2,283.00.*

École Crane involved eight youth in their schoolyard naturalization project. Youth participated in planting native vegetation to improve the front entranceway and helped to create two areas designed for play and educational purposes – the "trail head" and the kindergarten courtyard. *Approved $667.00.*

École Dieppe School involved 350 youth in their schoolyard enhancement project. Youth participated in planting flowers and shrubs. *Approved $1,628.00.*

École Lagimodière involved the school's youth in the Projet d'Embellisement de la Cours d'École. Youth participated in planting trees, flowers, and small shrubs as well as in the long-term maintenance of the site by helping with the weeding and watering. *Approved $5,000.00.*

Fort Whyte Centre involved 200 youth in a habitat enhancement project. Youth planted trees and built birdhouses to enhance the area around Lake Cargill at the Fort Whyte site. *Approved $5,000.00.*

George McDowell School involved 25 to 30 youth in a schoolyard beautification project. Youth assisted with the care and ongoing development of the school's planters and front entrance landscaping activities. *Approved $2,237.00.*

Glenlawn Collegiate involved 10 to 15 youth in a schoolyard beautification project. Youth participated in clean up activities, planted new garden beds, and had the opportunity to learn about landscape design, arboriculture, and horticulture from community experts. *Approved $2,915.00.*

H.C. Avery Middle School involved 75 youth in a schoolyard beautification project. Youth studied what plants, trees and shrubs were appropriate to the schoolyard area. They also participated in creating a garden and planting flowers and shrubs. *Approved $1,000.00.*

Indian Springs School involved up to 70 youth in a schoolyard beautification project. Youth planted trees in the schoolyard and created a small park where people from the community could gather to meet and sit. Every child in the school had the opportunity to plant a tree to call their own. *Approved $3,650.00.*

John W. Gunn Middle School involved 40 youth in the school's Environmental Team. Youth participated in organizing the school's recyclables and vermi-composting organic materials. *Approved $1,630.00.*

MacGregor Collegiate Green Team involved up to 250 youth in the creation of "Graduation Cove", which included a seating area as well as flower and tree planting activities. *Approved $3,400.00.*

Ma Mawi Wi Chi Itata Centre & the Burrows Central Residents Council involved 18 youth in a community garden project. Youth were introduced to natural species of tress, grasses and flowers and learned about returning the land to its natural state. *Approved $2,100.00.*

Pembina Valley Conservation District involved eight youth in the construction of two 3D-watershed models of the Pembina River Basin. Youth created watershed models to scale and labeled each model with locations of the roads and waterways. The models show how the land elevations vary and they will be used for educational purposes in local schools. *Approved $4,060.00.*

Spence Neighbourhood Association involved 29 youth in the development of a wheelchair accessible community garden and green space on a vacant inner city lot. Youth planted garden beds and constructed birdhouses. *Approved $4,510.00.*

St. John's High School involved 26 youth in the Buckthorn Eradication Program set up by the Coalition to Save the Elms, Friends of Omand's Creek and the Manitoba Naturalists Society. Youth removed Buckthorn, an invasive shrub, from Assiniboine Park and replanted native wild flowers and trees. *Approved $4,020.00.*

Ste. Marie School Parent Advisory Council involved 45 youth in a schoolyard beautification project. Youth were involved in preparing flowerbeds and planting grass, flowers, shrubs and trees. *Approved $1,800.00.*

Sturgeon Creek Collegiate involved six to 10 youth in the school's beautification project. Youth were involved in building seating areas and planting flower planters and trees. *Approved $1,550.00.*

The Indian and Métis Friendship Centre involved 15 to 30 youth in the project "Helping Mother Earth". Youth participated in general clean up activities, collecting recyclables, and starting plants and trees from seed. *Approved $2,338.00.*

Westwood Pride Committee involved 30 youth in the Westwood School's beautification project that included constructing benches and tables, potting new plants, and general clean up. *Approved $1,130.00.*

Winnipeg Métis Association Inc. involved 10 youth in the "It's My Community Too" project. Youth participated in activities including recycling, gardening, painting and community clean up. *Approved $800.00.*

Woodhaven Park Community Centre involved neighbourhood youth in a beautification project that included riverbank/stream clean up, tree planting, and trail enhancement activities. *Approved $1,775.00.*

EASTERN REGION

Aghaming Community involved six youth in a community clean up project. Youth were involved with cleaning debris on the shore of the Wanipigow River and clearing a historical portage from the first set of rapids to English Brook Campgrounds. *Approved $1,020.00.*

Bissett Community Council involved 12 youth in the construction of roadside flowerbeds. Youth planted annuals and perennials in flowerbeds constructed at two different sites. *Approved $1,760.00.*

Hollow Water First Nation involved 20 youth in a community garden project. The intent of the project was to teach respect for the environment and demonstrate the important role the environment plays in our physical and mental health. *Approved $3,015.00.*

First Nations Limited Partnership (Kiiwetino Ma''lingan) involved 22 youth in the First Nation Junior Ranger Program. Youth planted trees and conducted pre-harvest site assessments. The program was an opportunity for 16 to 18 year old youth to work and learn in an outdoor environment about the natural environment and the application of proven traditional and scientific methods for sustainable resource management. *Approved $2,500.00.*

Little Black River First Nation involved five to 20 youth in a walleye-spawning project. Youth participated in the design, construction, and implementation of several walleye spawning beds within the First Nation community and surrounding lands. *Approved $5,000.00.*

Pauingassi School involved 104 youth in a project to enhance bird habitat. Youth worked within the community in teams spanning all grade levels. Students also helped create a birdhouse and small flower garden to attract local wildlife. *Approved $3,000.00.*

Poplar River First Nation involved 12 youth in their riverbank clean up and restoration project. Youth removed garbage from the banks of the Poplar River and Franklin River that flows through the community. *Approved $3,306.00.*

School District of Whiteshell involved five to 10 youth in creating xeriscape garden areas around the schools. Youth were involved in preparing the ground, planting and maintaining shrubs and flowers. *Approved $3,500.00.*

Seymourville Community Council involved 10 youth in a community vegetable garden project. Youth participated in preparing the site, planting, and ongoing care of the garden.
Approved $2,010.00.

Springwell Colony School involved 21 youth in the planting of a shelterbelt. *Approved $585.00.*

Village of Powerview involved 25 youth in creating a park along the Winnipeg River. The Senior Four graduating class participated by laying sod at the site. *Approved $1,000.00.*

Wings of Power involved 10 youth in a community garden project at Pine Falls, Manitoba. Youth planted and maintained the garden, set up a composting system, and promoted awareness of gardening at community events. *Approved $3,432.00.*

INTERLAKE REGION

Brokenhead Education Authority involved 90 youth in a community-recycling project. Youth participated by placing collection containers throughout the school, Band Office, and other community locations.
Approved $1,000.00.

Brokenhead Ojibway Nation Health Centre involved youth and their families in the planting and maintaining of a community vegetable garden. Education opportunities were provided throughout the gardening season. *Approved $2,450.00.*

Brokenhead Ojibway Nation involved 98 youth in a one-day community clean up. Youth also participated in education-related activities that focused on the importance of taking care of the community and the environment.
Approved $700.00.

Gimli High School Environment Club involved 20 youth in the creation of an outdoor classroom and park-like area in the schoolyard. Youth helped to create the park-like area by planting trees and perennials and constructing benches and picnic tables. *Approved $3,580.00.*

Meadow Portage Community Council involved three youth in upgrading and enhancing the Community Park and surrounding area. Youth participated in repairing recycling bins, creating disposal area signs, and beautify the new historical site area. *Approved $2,300.00*

Mallard Community Council involved youth in a community beautification and enhancement project focussing on the clean up of a tornado-damaged area. *Approved $2,910.00.*

Peguis First Nation Training & Employment involved 240 youth in Environmental Awareness Week. Youth participated in a community clean up and recycling activities. *Approved $1,400.00.*

Prime Meridian Trail Association involved up to 100 youth in the planting of natural vegetation along the Prime Meridian Trail. The trail is a 116-km long, non-motorized multi-use conservation, recreation, and heritage trail on an abandoned rail line. Youth participated in planting wild flowers and tall grass prairie along the trail. *Approved $2,100.00.*

Rural Municipality of St. Andrews involved up to 20 youth in a community beautification project. Youth planted trees to create a shelterbelt and participated in community clean up activities. *Approved $1,150.00.*

NORTHEAST REGION

Barren Lands First Nation involved 40 to 80 youth in the Awasisak Recycling Initiative. This initiative targeted the issue of garbage disposal through informational workshops and the creation of recycling collection containers. *Approved $3,350.00.*

God's Lake First Nation involved 20 youth in a community enhancement and clean up project. *Approved $1,820.00.*

Pikwitonei Community Council involved 20 youth in a community clean up project to restore the Pikwitonei Rapids area to its original beauty. Youth participated in picking up garbage and clearing underbrush. *Approved $3,916.00.*

Wabowden Community Council involved five to 20 youth in clean up activities along the Bowden Lake shoreline. Youth helped to rehabilitate and enhance the shoreline by removing debris and deadfall. *Approved $2,787.00.*

NORTHWEST REGION

Cormorant Council involved 10 youth in a community beautification and enhancement project. Youth participated in constructing a flowerbed at the park, cleaning community areas, roadsides and ditches of garbage. *Approved $2,770.00. Expended $2,643.90.*

Cranberry Portage Elementary School involved 95 youth in their habitat enhancement and vermi-composting projects. Youth participated in constructing mallard nest structures and bird feeders, planting trees, and implementing a classroom vermi-composting project. *Approved $1,622.00.*

Flin Flon and District Chamber of Commerce involved four youth in the creation of a park-like setting at Hapnot Lake. Youth cleaned up the south end of Hapnot Lake and planted flowers as part of the creation of a sitting area for visitors to watch the resident ducks. *Approved $2,280.00.*

Pukatawagan Drop-in Centre involved 12 youth in clean up activities in the community and along approximately 2 kms of shoreline. *Approved $1,275.00.*

WESTERN REGION

Baldur School involved 100 youth in a project to beautify the school grounds and the community by planting trees and flowers and constructing raised flower boxes, park benches, and recycling bins for use in the community. *Approved $4,000.00.*

Barrows Community Council involved 28 youth in community clean up activities. Youth participated in planting trees and flowers in designated community flowerbeds.
Approved $2,340.00.

Brandon Family YMCA involved 1,000 youth in their Summer Day Camp Environmental Awareness Program. Youth were involved in clean up activities, planting trees, and educational activities to learn about animals, nature, air pollution, and the life cycle.
Approved $3,780.00.

Camperville Community Council involved 12 to 14 youth in a community clean up project. Youth helped to clean up the waste disposal site, community ditches, PTH #20 ditches extending south on 8 km, and approximately 0.7 km of Lake Winnipegosis shoreline. *Approved $2,135.00.*

City of Brandon Community Services involved 60 to 100 youth in an outdoor camp for kids. Youth participated in a number of different activities such as recycling, composting, green space awareness, community clean up, planting and tree identification, and pond ecology.
Approved $2,700.00.

Crane River Recreation Committee involved eight to 10 youth in their Fun in the Sun Program. Youth helped to enhance two park areas and beachfront area. Youth assisted with watering the trees, constructing park benches and promoting the beachfront area. *Approved $2,400.00.*

Crocus Plains Regional Secondary School involved 16 youth in their schoolyard tree-planting project. *Approved $1,337.00.*

Hamiota Conservation Authority involved five to 10 youth in the Hamiota Rails to Trails project. Youth were involved in expanding the existing trail system, identifying and solving environmental issues in the community, and participating in reviewing the plan for the Hamiota Municipal Park.
Approved $4,295.00.

Margaret Bruce Campground Inc. involved 12 youth in their campground tree-planting project. The youth planted trees on the riverbank to help prevent erosion. *Approved $2,848.00.*

McCreary School involved 30 youth in their schoolyard beautification project. As part of a larger landscaping project, the youth created two plots for plant life science studies. They were also involved in organizing recycling and composting programs in the school. *Approved $2,941.00.*

Nature Valley School involved 16 youth in a habitat enhancement project. Youth participated in research activities related to bird habitats and then helped to construct birdhouses and feeders to attract birds within the community. *Approved $1,240.00.*

Pierson Environmental Group involved 40 youth in eight different projects themes entitled Tree Propagation, Clean Stream, 10-Year Blitz, Green Spot Development, Maintenance, Tree Nursery, Promotion, and Millennium. Pierson Environmental Youth Corps worked in partnership with the conservation district in propagating hundreds of tree cuttings that were planted throughout the area, cleaned up creek bank, and youth participated in planting of tree seedlings from their nursery in an erosion prone area. *Approved $5,000.00.*

Pine Creek First Nation School involved 10 to 20 youth in a community beautification project. Youth helped to plant trees and flowers around the new Band Offices. *Approved $850.00.*

Red Deer Lake Community Council involved 10 youth in a community beautification and clean up project. Youth also participated in planting flowers and trees. *Approved $2,990.00. Expended $2,989.54.*

Riverheights School involved 20 to 30 youth in a community enhancement project, "Riverheights' Clean up Crew". A weekly hour-long effort saw the youth clean and pick up garbage around the Riverheights area of Brandon. *Approved $100.00.*

San Clara/Boggy Creek Métis Local #239 involved 10 youth in a public awareness campaign to educate the community about environmental issues. Youth also participated in clean up activities in the community. *Approved $3,208.00. Expended $2959.16.*

Sapotaweyak Education Authority involved youth in clean up activities in the community and surrounding area. *Approved $1,405.00.*

Shoal Lake Garden Club involved 86 youth in their town beautification project. Youth cleaned up the riverbank and built birdhouses, watered hanging baskets, participated in a town clean up, and planted trees. *Approved $2,700.00.*

Spence Lake Recreation Committee involved six youth in a community beautification project. Youth planted and watered flowers and built birdhouses. *Approved $2,400.00.*

Tootinaowaziibeeng Treaty Reserve involved 12 youth in their river clean up project. Youth assisted in removing debris from sensitive areas of the Valley River and its tributaries. Once the project was completed, the youth gave a presentation to the community regarding their project activities and experiences. *Approved $3,000.00.*

Town of Reston involved 30 youth in their Community Conservation Development Program. The youth were involved in developing a town orchard, cleaning up the town shelterbelt, and creating additional green space in the community. *Approved $3,632.00.*

Valleyview Centennial School Parent Council involved 200 youth in an outdoor classroom. Students were provided with an outdoor learning environment while at the same time beautifying the school grounds and surrounding community. Youth planted perennials in three prepared beds. *Approved $2,630.00.*

Wawanesa Lions Club involved 10 youth in expanding the local riverside trail along the Souris River. Youth assisted in constructing a new trail, putting together signage, building tables and benches, and putting together media bulletins highlighting the trail's progress.
Approved $2,500.00.

Wuskwi Sipihk First Nation involved five to 28 youth in a wilderness camp. Youth were involved in cleaning up the Kettle Hills and The Point, popular vacation spots used by Wuskwi Sipihk community members and many neighbouring communities. *Approved $1,250.00.*

MANITOBA CLIMATE CHANGE ACTION FUND (MCCAF)

Managing Department: Manitoba Energy, Science and Technology, Climate Change Branch
Date Approved: 2002/2003 Estimates Review Minute
Total Amount Approved: $250,000.00
Total Amount Expended: $249,977.57

Summary:

On July 18, 2000, Treasury Board approved a four year $1.0 million Broad Allocation ($250,000.00 annually) under the Sustainable Development Innovations Fund for the Climate Change Action Fund (MCCAF). Manitoba Energy, Science and Technology, Climate Change Branch, administers the Manitoba Climate Change Action Fund (MCCAF) to support practical, Manitoba based, actions that respond to the issue of Climate Change. MCCAF will support projects focusing on public education and outreach; the scientific understanding of climate change impacts and potential adaptation practices; technological innovation (research and commercialization); energy efficiency and alternative or "green energy". MCCAF will provide up to 50% of the total budget costs.

During the 2002/2003 fiscal year, the Climate Change Branch was transferred from Manitoba Conservation to the new Ministry of Manitoba Energy, Science and Technology. The Minister of Conservation has delegated grant approval authority up to $25,000.00, including approvals cashflowed or phased over more than one fiscal year.

MCCAF SUMMARY

Total Allocation for 2002/2003	**$250,000.00**
Applications Processed	40
Applications Approved	13
Applications Deferred	11
Applications Declined	25
Applications Withdrawn	2
Total Amount for Grants Approved	$249,997.57
Total Amount Expended	**$249,997.57**

Brief descriptions of the 13 projects approved under the Manitoba Climate Change Action Fund during the 2002/2003 fiscal year are as follows:

EDUCATION AND OUTREACH

CARBON BANK PROGRAM

Proponent: Fort Whyte Centre
Date Approved: February 3, 2003
Total Amount Approved: $6,840.00
Total Amount Expended: $6,840.00

Summary:

A grant of $6,840.00 was approved to provide school children and the public with important relevant information about the accumulation of greenhouse gases and their effect on climate in a way that is highly visual and in terms that they can easily understand. In doing so, carbon sinks will be created, habitat will be increased, and opportunities for the community to participate in the project both on and off-site will be provided. This program will increase public understanding of climate change and the impacts of vehicle greenhouse gas emissions and will result in a reduction in Manitoba's transportation emissions as students and other visitors plant trees to offset their bus emissions to and from Fort Whyte Centre.

CLIMATE CHANGE EDUCATION IN MANITOBA

Proponent: University of Winnipeg, Faculty of Education
Date Approved: February 3, 2003
Total Amount Approved: $24,800.00
Total Amount Expended: $24,800.00

Summary:

A grant of $24,800.00 was approved to involve teachers in developing classroom materials that will enhance the teaching of climate change in Manitoba classrooms. The project will focus on two areas: an interdisciplinary project at grades 5 to 8 that will create connections between different subject areas using climate change as a theme and a Senior 3 unit as part of the newly developed Current Topics 30S course.

CLIMATE CHANGE PUBLIC EDUCATION AND OUTREACH HUB IN MANITOBA

Proponent: Manitoba Eco-Network
Date Approved: September 24, 2002
Total Amount Approved: $30,000.00
Total Amount Expended: $30,000.00

Summary:

A grant of $30,000.00 was approved to support a Manitoba climate change public education and outreach hub in Manitoba called the Climate Change Connection. The Climate Change Connection will be a clearinghouse of climate change information and resources that aims to build awareness in the community to empower Manitobans to take action to reduce their greenhouse gas emissions, both individually and as a community. The overall purpose of the Climate Change Connection is to increase the coordination and interaction of groups that are active, concerned or knowledgeable in the area of climate change public education and outreach. The Connection will promote better informed and resourced efforts undertaken by the various groups involved in the Climate Change Connection. It will build upon existing opportunities and structures, as well as proactively seek new opportunities to extend the reach of public education and outreach programs to achieve these objectives.

LOCAL COMMUNITY ADAPTATION TO CLIMATE CHANGE

Proponent: Manitoba Model Forest Association
Date Approved: February 3, 2003
Total Amount Approved: $7,100.00
Total Amount Expended: $7,100.00

Summary:

A grant of $7,100.00 was approved to assist with holding three climate change workshops that are intended to educate and raise both the public's and forestry profession's climate change awareness by bringing in experts to explain the potential impacts, adaptation and opportunities related to climate change. Two of the workshops were implemented at the community level and held in Lac du Bonnet and Little Black First Nations. As well as ensuring the communities understand the potential impacts of climate change, there is a need to identify possible adaptation measures within the community context and to develop action plans and pilot projects that could be undertaken. The workshop for northern and Aboriginal peoples also focussed on consulting and documenting traditional knowledge to capture the historical record and evidence related to climate change. The third workshop was held at the University of Winnipeg and was more technical in nature, focusing on Manitoba's forestry sectors, providing information to improve the environmental sustainability of forest management activities and other uses of the Boreal forest and adjoining areas.

ENERGY EFFICIENCY, ALTERNATIVE OR RENEWABLE ENERGY

185 SMITH STREET SOLAR WALL DEMONSTRATION

Proponent: Manitoba Housing Authority
Date Approved: October 15, 2002
Total Amount Approved: $50,000.00
Total Amount Expended: $50,000.00

Summary:

A grant of $50,000.00 was approved to showcase the Government of Manitoba's commitment to addressing climate change issues through the use of a renewable energy source to offset consumption of natural gas, an imported energy source at Manitoba Housing Authority's 185 Smith Street apartment complex and District/Head Office. The "solar wall" technology is a solar collector system that utilizes a metal cladding system on the outside of the wall system as a heater for the outside air entering the building. The heat loss of the wall is returned back inside the building together with the solar heat absorbed by the air. The system provides for higher efficiency heating, weather protection for older walls and improved air quality in high rise apartments and other building types. Improved energy efficiencies and occupant comfort will result from the use of solar energy and improved control of mechanical systems.

A SURVEY OF HEAVY TRUCK FUEL CONSUMPTION IN MANITOBA

Proponent: University of Manitoba Transport Information Group (UMTIG)
Date Approved: July 11, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to conduct a survey of Manitoba heavy trucking fuel consumption to then relate a variety of operating characteristics to their environmental impacts. It will develop cooperation among a leading Manitoba industry to facilitate the governmental task of reducing greenhouse gas emissions. The project strikes a double role of both building emission-modeling capabilities and educating a large sector of the Manitoba economy. Fuel consumption relates the environmental impact and the general fuel demand of a particular journey, thus making its study of particular interest. Conducting a local survey and reporting its results will enhance best-practices scenarios to the Manitoba trucking industry. Considering the nature of Manitoba climatic conditions and the variety of routes within the province, the data collected will be of national interest.

EVALUATION OF EMISSIONS FROM URBAN TRANSIT BUSES OPERATING ON ETHANOL-BLENDED DIESEL

Proponent: Husky Energy Inc.
Date Approved: July 11, 2002
Total Amount Approved: $13,297.57
Total Amount Expended: $13,297.57

Summary:

A grant of $13,297.57 was approved to conduct a project to measure the emissions from an urban transit bus operating on ethanol-blended diesel, and compare the emissions to the same bus operating on conventional diesel. This testing will indicate reductions of the greenhouse gases, carbon monoxide and carbon dioxide, as well as particulates. This project could confirm the emission benefits of ethanol-blended diesel fuel in Winnipeg with Winnipeg Transit buses.

IMPACTS AND ADAPTATION

AN ASSESSMENT OF CLIMATE CHANGE IN MANITOBA USING BUTTERFLIES AS BIOLOGICAL INDICATORS OF A POLEWARD SHIFT OF SPECIES GEOGRAPHIC RANGE ASSOCIATED WITH REGIONAL WARMING

Proponent: University of Winnipeg
Date Approved: July 11, 2002
Total Amount Approved: $4,800.00
Total Amount Expended: $4,800.00

Summary:

A grant of $4,800.00 was approved to complete the data analysis and integration component of a previous project. Butterfly information will be merged with climate change data field results collected in May 2001 to March 2002 and a multivariate analysis of the various interactions will be conducted to determine the degree to which fundamental climate characteristics of southeastern Manitoba have (or have not) migrated, in response to inter-annual climate variability and long-term climate change. These assessments, when integrated with the butterfly observations, will indicate the degree to which the geographic ranges of butterflies can be used as bioindicators of climate variability and change within the region and provide a concrete example if climate change is having a local impact in Manitoba.

CHARACTERISTICS OF SNOW COVER AT BOREAL FOREST-TUNDRA TRANSITION ZONE: IMPLICATIONS FOR A CHANGING CLIMATE

Proponent: Churchill Northern Studies Centre
Date Approved: February 3, 2003
Total Amount Approved: $13,160.00
Total Amount Expended: $13,160.00

Summary:

A grant of $13,160.00 was approved to assist with quantifying environmental changes resulting from climate change across the Arctic treeline and educate the public on climate change issues. For the most part, field investigations have been restricted to the relatively short, but active period of summer. In order to build a comprehensive understanding of the implications of environmental changes resulting from climate change across the Arctic treeline, the complete development and progress of winter must be documented. This project will build upon the existing strengths of Churchill Northern Studies Centre's long-term ecological monitoring program and the involvement of Earthwatch Institute by permitting the collection of environmental data on snowpack characteristics at a total of ten study plots extending from the tundra, across the treeline into the boreal forest, through the entire winter. Data will be collected on a variety of variables relating to snow and ground thermal regimes. Information and activities will also be incorporated into all educational programming undertaken by the Churchill Northern Studies Centre.

ESTABLISHMENT OF A MANITOBA-PARC CLIMATE CHANGE COORDINATOR

Proponent: University of Winnipeg (C-FIR)
Date Approved: July 11, 2002
Total Amount Approved: $20,000.00
Total Amount Expended: $20,000.00

Summary:

A grant in of $20,000.00 was approved to address what is believed to be the major impediments to more robust climate change impacts and adaptation research in Manitoba, by establishing a provincial climate change coordinator who will take a proactive role in climate change research and organization. Climate change research in Manitoba is presently poised to grow tremendously over the next few years. While there are a large number of groups engaged in various aspects of climate change impacts and adaptation, the climate change community remains somewhat fragmented, and certain key research areas are not adequately covered. The establishment of a Manitoba-PARC Climate Change Coordinator position is felt to be essential for ensuring that climate change received the necessary exposure in the province.

PAST AND FUTURE CLIMATES: A DENDROCHRONOLOGICAL RECONSTRCUTION OF FIRE HISTORY AND LARCH SAWFLY OUTBREAKS IN HUDSON BAY LOWLAND ECOREGION, SUBARCTIC MANITOBA

Proponent: University of Winnipeg (C-FIR)
Date Approved: June 11, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to conduct the second year of a project whose main objective is to understand how climatic change may influence disturbance dynamics in northern Manitoba. The project will use dendrochronological data to reconstruct the past fire history and larch sawfly outbreak history, of the southern portion of Wapusk National Park. This study is intended to provide managers and researchers with baseline ecological knowledge about some of the processes involved in the definition of vegetation landscape features and how these relate to past, present and future climatic conditions. It is intended that a reference chronology for black spruce, white spruce and larch will be developed. The project will provide data to determine whether fire frequency has increased or decreased over time. Information will also be provided on potential biophysical impacts of climate change and how this may affect northern communities. It will allow assessment of how climate in the past has affected the landscape and will provide a better understanding of fire dynamics to help predict what may occur in the future.

RESTORATION OF AGRICULTURAL LANDSCAPES AS A MEANS OF ADAPTING TO A CHANGED CLIMATE

Proponent: University of Manitoba, Department of Soil Sciences
Date Approved: February 3, 2003
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to assess the physical and economic feasibility of landscape restoration to buffer against the adverse effects of a changed climate. The project will also assess the impacts of soil degradation and restoration on the emission of greenhouse gases from agricultural landscapes. Anticipated climate changes will demand more efficient use of precipitation in Manitoba's crop production if it is to be sustained. Conservation tillage is one means of adapting to a changed climate. In addition to conservation tillage, landscape restoration may be required on hilly landscapes subject to soil erosion. Landscape restoration may be a more effective means of adapting to a changed climate than conservation tillage (possibly greater and certainly more immediate improvement to soil moisture conditions).

TECHNICAL INNOVATION

ENERGY PRODUCTION AND MANURE STABILIZATION OF THE BIO-TERRE SYSTEM IN MANITOBA

Proponent: Bio-Terre Systems Inc.
Date Approved: February 3, 2003
Total Amount Approved: $20,000.00
Total Amount Expended: $20,000.00

Summary:

A grant of $20,000.00 was approved to demonstrate the effects of novel anaerobic digestion technique on swine manure treatment in Manitoba's climate. The proposed project will use two identical earthen vessel anaerobic reactors to treat manure in a 6000 head hog feeder farm. The treatment is expected to reduce the organic content in the slurry by 75% in terms of soluble Chemical Oxygen Demand (COD) and eliminate odours in the effluent as well as reduce greenhouse gas emissions. During part of the year, the heat produced will be available to provide space heating for the hog barns to supplement digester heat losses. The research and development focus of the project is concentrated in three areas, the design and construction of prototype earthen vessel digesters; the design, development and evaluation of a remote, automated digester control and management system; and the evaluation of the net energy production and energy utilization of Manitoba's swine farms.

MANITOBA HABITAT HERITAGE CORPORATION SOUTHWEST (AGRO) WOODLOT PROGRAM

Managing Department: Manitoba Conservation, Forestry Branch
Date Approved: 2002/2003 Estimates Review Minute
Total Amount Approved: $312,400.00
Total Amount Expended: $210,870.00

Summary:

On March 6, 2001, Treasury Board approved a Broad Allocation of $312,400.00 commencing in 2001/2002 under the Sustainable Development Innovations Fund to support the operations of the Manitoba Habitat Heritage Corporation Southwest (Agro) Woodlot Program. Manitoba Conservation, Forestry Branch, administered this grant funding.

Following are brief descriptions of the services and activities undertaken through this program during the 2002/2003 fiscal year:

Woodlot Management Planning

The staff of the Manitoba Agro Woodlot Program (MAWP) assisted interested landowners in woodlot management planning. As well, staff assisted other landowners, to re-market pulpwood harvested and stacked by logging contractors as a result of lost contracts with the Minnesota mill for aspen pulpwood.

Landowners also requested that MAWP mark trees for harvest in hardwood stands to supply the increasing interest in local hardwood lumber. Some small-scale logging contractors have adopted this non-traditional management strategy of marking future crop trees, harvesting the worst first and utilizing/valued added processing lower grade logs.

Since 1992/1993, the Agro Woodlot Program has completed 252 woodlot management plans on a total of 32,149.1 acres.

Table 1: Woodlot Management Planning Summary

Office Location	Number of				
	Timber Assessments	Management Plans Completed	Management Plan Acres [1]	Management Plans In Progress	Landowners Waiting
Killarney	5	23	3,297.7		
Minnedosa	5	16	1,622.0		
Total	10	39	4,919.7	2	14

[1]Number of acres under woodlot management – i.e. cruised but not necessarily the total number of wooded acres owned.

Tree Planting

MAWP contributed to planning for the Canadian Forest Service's hybrid poplar plantations. As of the end of the planting season in 2003, the MAWP will not be involved in agroforestry tree planting projects. The MAWP will be providing technical assistance for shelterbelt design in the Rural Municipality of Turtle Mountain, as the municipality has specified that they must be consulted in order to obtain a condition land use permit for establishment of an Intensive Livestock Operation (ILO).

Since 1992/1993, the MAWP has been instrumental in planting 1,061,019 trees and shrubs on 816 landowner projects and 66,613 trees on 139 community projects. In total since 1992/1993, MAWP has planted 1,127,632 trees and shrubs on 955 projects.

Communications

MAWP staff has completed five newspaper articles that will appear in a series in the Farmers' Independent Weekly. These articles were paid for by the Manitoba Model Forest and will promote the partnership with the Manitoba Forestry Association. The articles range from promoting community forestry enterprises to meet the needs of individual landowners; to updating Standardization of Woodlot Management Planning progress; developing the Beneficial Management Practices Manual; and doing a follow-up on the Full Vigour Forestry Workshop.

MAWP has sent out letters to micro forestry operators to determine the potential interest in a lumber sale in the fall of 2003.

Workshop Progress

Staff of MAWP held eleven workshops during the 2002/2003 fiscal year, four workshops on Micro Forestry and seven workshops on other topics such as Community Tree Care, Tree Planting, Bioengineering, First Nations Forestry Conference and the Lumber Auction. Since 1992/1993, MAWP has conducted a total of 103 workshops with 1,870 participants (see Table 2).

Table 2: Training Workshop Summary

Workshop Type	Number of	2001/2002	Total (1992/93 – 2001/02)
Micro Forestry Workshops [1]	Workshops	4	54 + 4 = **58**
	Participants	63	648 + 63 = **45**
Other Workshops [2]	Workshops	7	38 + 7 = **45**
	Participants	114	1,045 + 114 = **1,159**
Total	Workshops	11	92 + 11 = **103**
	Participants	177	1,693 + 177 = **1,870**

[1]Forestry Workshops include Chainsaw Operation and Maintenance, Bandsaw Mill Alignment, Circular Sawmill Operation and Maintenance, Hardwood Lumber Grading, Kiln Drying, Maximizing Economic Returns from Hardwood, Square Timber Building, Wood Turning, and Wealth in Woodlots etc.

[2]Other includes Community Tree Care, Bioengineering, First Nations Forestry Conference and Lumber Auction etc.

Contacts/Partnerships

MAWP staff contributed to the Manitoba Model Forest Woodlot initiative. The standardized woodlot management planning project is nearly completed and progress has been made in sharing the experiences of the Manitoba Forestry Association and the Manitoba Habitat Heritage Corporation (MHHC).

Work has progressed on the MHHC Beneficial Management Practices Guidelines project. Drafts have been completed on the Introduction and Harvesting Guidelines and representatives of interested groups have come forward to review the drafts. The project is scheduled to be ready for publishing in the fall of 2003. This could potentially lead to logger training and certification for private land forestry.

Staff contributed to the development of the Manitoba Forestry Association's Feasibility Assessment of Afforestation for Carbon Sequestration (FAACS) project by organizing the Afforestation on the Prairies – Opportunities and Challenges Workshop.

MAWP staff met with the Little Saskatchewan River Conservation District to discuss potential areas for cooperative program delivery, including workshops, bioengineering, incentive options and Boy Scout planting.

ORPHAN MINE SITE ASSESSEMENT PROGRAM

Managing Department: Manitoba Conservation, Headquarters Operations
Date Approved: 2002/2003 Estimates Review Minute
Total Amount Approved: $250,000.00 (2002/2003)
Total Amount Expended: $231,652.08 (2002/2003)

Summary:

Treasury Board approved a four year $1.0 million Broad Allocation ($250,000.00 annually) commencing in 2001/2002 under the Sustainable Development Innovations Fund for the Department of Conservation to undertake site specific human health and environmental site assessments at identified orphan/abandoned mine sites (Refer to Table 1).

TABLE 1

A total of$1,000,000.00 was approved over a four-year period for the following assessment projects:

Location	Approved Amount	Assessment Project	Status	Total Expenditure to Date
Sherridon	$20,000.00 $330,000.00	• Hydrogeological/chemistry study • Site Specific Human Health and Ecological Risk Assessment	- Completed - Initiated November 2002	$19,617.22 $15,207.42
Gods Lake	* TBD	• Site Specific Human and Ecological Health Risk Assessment	- In future (2002-05)	
Lynn Lake	$330,000.00	• Site Specific Human and Ecological Health Risk Assessment	- November 2001 to March 2002 - March 2002 to March 2003	$71,375.42 $216,444.66
Snow Lake	* TBD	• Site Specific Human and Ecological Health Risk Assessment	- In future (2002-05)	
Baker Paton	* TBD	• Site Specific Human and Ecological Health Risk Assessment	- In future (2002-05)	

*To Be Determined

Two assessments were initiated in 2001/2002, one at Sherridon and the other at Lynn Lake. The Sherridon study represented a continuation of a hydrogeological/geochemical study of the Sherridon Mine tailings impoundment. This study provided important environmental information on the impacts of the mine tailings on the adjacent water bodies and the data obtained will be applied in the site specific risk assessment that was initiated in November 2002. Data collection was completed over the summer and early fall of 2001. This involved collection of groundwater and surface water samples around the mine tailings impoundment and assessment of hydrogeological/geochemical conditions. The samples were analyzed and a report was provided to Manitoba Conservation. The information from the hydrogeological/geochemical study will be applied in the risk assessment model currently being developed as part of the Cold Lake/Sherridon Human Health and Environmental Risk Assessment..

Due to delays in the approval of consultants and the seasonal nature of the work, the expenditures for both the Lynn Lake Risk Assessment and Cold Lake/Sherridon were both below projections. The unexpended funds from this fiscal and the previous fiscal years will be required in future to facilitate the assessment of the remaining four orphaned/abandoned mine sites. Although the Lynn Lake Risk Assessment has been completed, some invoices will be processes in the 2003/2004 fiscal year.

COLD LAKE/SHERRIDON RISK ASSESSMENT

Total Amount Expended 2002/2003: $15,207.42

Summary:

In August 2002, Manitoba Conservation met with the Cold Lake/Sherridon Town Council and conducted a public meeting on the proposed Cold Lake/Sherridon Human Health and Environmental Risk Assessment. A Request-for-Proposal (RFP) was developed and issued. The selection committee, consisting of representatives from Manitoba Conservation, Manitoba Industry, Trade and Mines and Manitoba Health, reviewed the consultants' proposals. UMA Engineering, in association with Senes Consulting, was selected to undertake this risk assessment. In November 2002, UMA initiated a review of existing human health and environmental data. Based on the available information, UMA proposed a monitoring plan that was reviewed by Manitoba Conservation's Technical Advisory Committee (TAC). This TAC consists of the same representation as the Lynn Lake TAC, however the Town Council of Cold Lake/Sherridon selected their representative to participate in the TAC.

On March 6, 2003, Manitoba Conservation and Industry, Trade and Mines, and its consultants conducted meetings with the Town Council of Cold Lake/Sherridon and the public to solicit community input on the monitoring plan. UMA has commenced air monitoring and will conduct environmental monitoring during the remainder of 2003. Concurrently, a risk model will be developed similar to the Lynn Lake project and the risk assessment will be completed in the spring of 2004.

LYNN LAKE RISK ASSESSMENT

Total Amount Expended 2002/2003: $216,444.66

Summary:

On September 5, 2001 a public meeting was held in Lynn Lake to provide the local community and the Marcel Colomb First Nation an opportunity to provide input on a Request-for-Proposal (RFP) to undertake a site specific human health and environmental risk assessment at Lynn Lake. The RFP was issued and a contract was awarded to Dillon Consulting Limited in November 2001. A Technical Advisory Committee (TAC) consisting of technical staff from Manitoba Conservation, Manitoba Health and Manitoba Industry, Trade and Mines has been established to provide guidance to the consultant. The Town of Lynn Lake and the Marcel Colomb First Nation have been invited to participate in the TAC. The consultant has reviewed existing human health and environmental data to determine if there are data gaps. Based on the review, the consultant developed and implemented a monitoring plan to obtain the necessary data for the risk assessment. Meetings were held with the Lynn Lake Community Adjustment Committee and the Marcel Colomb First Nation on March 20, 2002, and a Public Open House was conducted to review the plan. Manitoba Conservation, Manitoba Health, Manitoba Industry, Trade and Mines and the consultants provided information on the proposed sampling/monitoring program for the community.

The plan was implemented in the spring 2002. In addition, the consultant has initiated work on environmental and human receptor characterization. This work identified important ecological features in order to develop a clear understanding of the local ecosystems and indigenous wildlife and all relevant human receptors in the community. These tasks were completed in the spring of 2002. Contaminant characterization to assess ambient air exposure, indoor air exposure, contaminant releases, exposure pathway analysis, aquatic/terrestrial exposure and uncertainty analysis, was also conducted. The hazard assessment and risk characterization were completed in February 2003, and the final report was completed in March 2003. Meetings with the Town Council, Marcel Colomb First Nation and the public were conducted on April 9, 2003. A document summarizing the risk assessment report was provided to all residents of Lynn Lake and has been made available to the public through Manitoba Conservation's offices in Lynn Lake, Thompson and Winnipeg. The risk assessment report has been released and distributed to Lynn Lake Town Council, Lynn Lake Library, Marcel Colomb First Nation, Manitoba Health (Thompson), Manitoba Conservation (Thompson), Manitoba Industry Trade and Mines, Manitoba Conservation Library, Manitoba Conservation Headquarters, Legislative Library and Environment Canada (Winnipeg).

ORPHAN MINE SITE REHABILITATION PROGRAM

Managing Department: Manitoba Industry, Trade and Mines, Mines Branch
Date Approved: 2002/2003 Estimates Review Minute
Total Amount Approved: $250,000.00 (2002/2003)
Total Amount Expended: $249,599.04 (2002/2003)

Summary:

On July 18, 2000, Treasury Board approved-in-principle a four-year $1.0 million Broad Allocation ($250,000.00 annually) from the Sustainable Development Innovations Fund to Department of Industry, Trade and Mines, Mines Branch, for an Orphan Mine Site Program to rehabilitate Crown owned orphan mine sites in Manitoba. The four-year work plan includes rehabilitation at Sherridon, Gods Lake, Baker Paton, Snow Lake and East Lynn Lake.

The total expenditure for Fiscal Year 2002/2003 was $249,599.04 and the details are given below in Table 1.

Table I

Project Location	Total SDIF Approval ($)	Expenditure for 2000/01/02 ($)	Expenditure for 2002/03 ($)	Total Expenditure up to March 31, 2002 ($)
Sherridon	100,000	74,729.09	16,050.84	90,779.93
Gods Lake	250,000	219,368.23	3,224.81	222,593.04
Snow Lake	20,000	29,430.33	25,000.00	54,430.33
Lynn Lake	500,000	26,708.68	11,793.83	38,502.51
Baker Paton	150,000	nil	193,529.56	193,529.56
Total	**1.0 M**	**350,236.33**	**249,599.04**	**599,835.37**

Sherridon

One rectangular perimeter fence to accommodate all hazardous areas and around the main shaft headframe, and perimeter fences around two open ventilation raises, were installed during the summer of 2002. Warning signs as per specifications were secured to all four sides of the perimeter fence (total of sixteen signs). A site inspection was carried out by Mines Branch in November 2002 and the rehabilitation work has been completed to the satisfaction of the Mines Branch.

God's Lake

No. 1 and Pumphouse Raise – The outstanding work of re-levelling of the shaft caps due to settlement, tightening of rock bolts and grouting of the lifting hooks indentations were completed during winter of 2003.

Jowsey Island – Shaft cap installed and the boiler removed from the site. Site inspection by Mines Branch.

Lynn Lake

An evaluation of the acid generation potential of the road base fill used in the construction of the north end of Burnt Timber mine access road, located southeast of the Town of Lynn Lake, was undertaken.

A site investigation was carried out along a 3-km stretch of the Burnt Timber Road located north of PR #397. Twenty-three shallow and deep roadbed samples were retrieved from the road bed material. A total of sixteen static Acid Base Accounting (ABA) tests were performed for evaluating the potential generation of acid rock drainage (ARD) from the backfill.

The results showed that out of the sixteen samples tested, only two samples exhibit a potential for ARD generation. These two samples were collected close to the north end of the road, adjacent to the currently abandoned mine site. The geochemistry of all the other samples showed that they are not acid consuming materials; therefore ARD generation is not expected from these samples.

Based on the laboratory test results and the visual inspections, it can be concluded that the road bed material used in the construction of this stretch of road section is not acid generating, with the possible exception of a 700 m section at its north end, where sulphide-bearing material may have been mixed up and used with sulphide-free borrow material, in an unknown proportion.

Snow Lake

In the spring of 2002, four sample holes were drilled into the Arsenic Residue Pile to obtain five-foot lengths of HQ3 core. The core is currently stored in a Kenmore heavy-duty deep freezer at the University of Manitoba to prevent thawing.

During the fall of 2002, the core was split in half and samples were logged, each length of core in detail. One half of each length of core remains intact in storage at the University of Manitoba.

Samples were taken from drill hole two at approximately five-foot intervals and analyzed. Geochemical and mineralogical composition of each sample is ongoing. All geochemical analysis takes place at the University of Manitoba. Several samples are being analyzed for bulk geochemical content using an Inductively Coupled Plasma Optical Emission Spectrometer. Polished thin sections are being prepared at Vancouver Petrographics.

Further geochemical analysis of solids will occur in early 2003 using an Inductively Coupled Plasma Mass Spectrometer (ICP-MS). Sequential extraction will determine the partitioning of arsenic, iron and several other elements into specific mineralogical phases. Research of methods to extract water from the core will lead to analysis of water samples by ICP-MS at the University of Manitoba. Mineralogical analysis comprises two parts: dried samples and polished thin sections. Scanning electron microscopy and X-ray diffraction will identify mineralogical phases in dried samples. Analysis of polished thin sections will take place using transmitted light microscopy and electron microprobe at the University of Manitoba. Analysis of thin sections is ongoing with the intent of using Near Edge X-ray Absorption Fine Structure and X-ray Absorption Near Edge Structure to determine speciation of arsenic in individual mineral grains.

The final report of the study will be published in summer 2004.

Baker Patton

A contract was awarded to Acres Manitoba Ltd. The consultant carried out the following scope and provided the engineering services to rehabilitate Baker Patton Mine site. The consultant reviewed all pertinent information related to Baker Patton Mine site, including historic data, drawings, repairs, air photos, maps, etc. A site inspection was carried out and detailed topographic maps were established. The consultant prepared a detail scope of work and technical specifications, the Technical Advisory Committee reviewed the scope, and the final scope was established in December 2002. A Request for Quotes was invited and the actual rehabilitation work was awarded to Strilkiwski Contracting of Dauphin, Manitoba.

WASTE REDUCTION AND POLLUTION PREVENTION FUND

Managing Department: Manitoba Conservation, Pollution Prevention Branch
Date Approved: 2002/2003 Estimates Review Minute
Total Amount Approved: $550,000.00
Total Amount Expended: $549,831.56

Summary:

On May 30, 2000, Treasury Board authorized the Department of Conservation to proceed with the implementation of a new Broad Allocation, the Waste Reduction and Pollution Prevention (WRAPP) Fund, which is to be funded from the Sustainable Development Innovations Fund. This program was allocated $550,000.00 for the 2002/2003 fiscal year, as part of a four-year $2.2 million Broad Allocation.

The WRAPP Fund will support projects in the following priority areas: construction and demolition waste management; organic waste management and composting; institutional waste reduction; market development; pollution prevention; model integrated waste management system development and planning; promotion and education; and regional recycling. Financial partnerships are encouraged.

Up to $100,000.00 of the total allocation is set aside for program development.

The Minister of Conservation has delegated grant approval authority up to $25,000.00, including approvals cashflowed or phased over more than one fiscal year.

WRAPP FUND SUMMARY

Total Allocation for 2002/2003	**$550,000,00**
Applications Processed	50
Applications Approved	32
Applications Deferred	7
Applications Declined	11
Applications Withdrawn	0
Total Amount for Grants Approved	$491,700.00
Total Amount for Grants Expended	$491,678.30
Program Development (consultations, promotions, contracts, seminars, supplies, etc.)	$ 58,153.26
Total Expended	$549,831.56

Brief descriptions of the thirty-two (32) projects within the priority WRAPP areas are as follows:

C & D WASTE

NORTHERN SCRAP METAL RECOVERY

Proponent: Lynn Lake Salvage
Date Approved: December 6, 2002
Total Amount Approved: $12,000.00
Total Amount Expended: $12,000.00

Summary:

A grant of $12,000.00 was approved to clean up abandoned scrap metal from several locations in Northern Manitoba. The project is comprised of two separate cleanups, Fox Road and Laurie Lake/Eager Dam. Much of the scrap at these sites is within areas used by recreational outfitters. Lynn Lake Salvage will remove all scrap at these sites, including that which cannot be sold to market.

COMPOSTING

BACKYARD COMPOSTER SALE

Proponent: City of Winnipeg
Date Approved: June 17, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to sell 10,000 Earth Machine composters to the general public at a discounted price of $25.00 each. The objective was to promote the benefits and practice of composting among City of Winnipeg residents. The sale took place on June 1, 2002 at four different locations in the City. It is estimated that each composter could potentially divert 100 kg per year of organic waste from landfills. A follow-up survey was conducted to determine the level of participation in this promotion, and determine the effectiveness of this strategy in the City's overall waste reduction goals.

COMPOSTING FACILITY ENHANCEMENT

Proponent: City of Winkler
Date Approved: February 20, 2003
Total Amount Approved: $12,250.00
Total Amount Expended: $12,250.00

Summary:

A grant of $12,250.00 was approved to enhance the organic waste management and composting facility through the addition of a compost shredder/screen. The addition will enable the facility to extract compost contaminants and litter, and blend the finished compost with soil to produce high-quality topsoil that will be made available to Winkler residents free of charge. Excess materials will be available for municipal projects. The current average annual waste diversion for Winkler through curbside composting is 23%.

MANITOBA IN BLOOM COMPOSTING PROMOTION

Proponent: Manitoba in Bloom
Date Approved: February 20, 2003
Total Amount Approved: $10,600.00
Total Amount Expended: $10,600.00

Summary:

A grant of $10,600.00 was approved to encourage environmental awareness and community participation in the Manitoba in Bloom Program. Manitoba in Bloom will foster improved waste management practices by making available subsidized compost bins for distribution in participating communities. The Manitoba in Bloom Program evaluates "Environmental Awareness" as one of eight categories in scoring communities registered in the "Communities in Bloom" Program. The introduction of backyard composting will contribute to the overall "score" of communities participating in the program. Manitoba in Bloom will also encourage the communities to hold educational workshops on composting.

NATIONAL COMPOST STANDARDS REVIEW

Proponent: Compost Council of Canada
Date Approved: December 6, 2002
Total Amount Approved: $5,000.00
Total Amount Expended: $5,000.00

Summary:

A grant of $5,000.00 was approved to undertake a review of the National Compost Standard in partnership with the Compost Council of Canada and Canadian Council of Ministers of the Environment. The process will focus on the review of the existing standard and parameters (trace elements, pathogens, maturity, and foreign matter content). It will involve representatives from producers, end users and other interest groups on an equal representation basis. The recommended revisions (if any) would be made available for a 30-day public comment period.

VERMI-COMPOSTING PROMOTION PROJECT

Proponent: Wriggler Wranch
Date Approved: February 20, 2003
Total Amount Approved: $3,000.00
Total Amount Expended: $3,000.00

Summary:

A grant of $3,000.00 was approved to promote the benefits of vermi-composting activities in Manitoba through the distribution of discounted vermi-composting bins to schools, businesses and households. Wriggler Wranch will also conduct a demonstration project and follow-up phone surveys to evaluate the success of the project and monitor composting activities.

YARD WASTE COLLECTION PILOT PROGRAM

Proponent: City of Winnipeg
Date Approved: February 20, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to conduct a pilot yard waste collection program to test the feasibility for implementing a full-scale yard waste collection program. The program will be conducted in ten different areas of the City with approximately 1,000 residents in each. Participation in the program will be voluntary and initiated with the delivery of an information package, and will involve grass and leaves being collected separately from other garbage and recyclables. Materials will be taken to the Brady Road Landfill to be composted. The WRAPP Fund funded this project for $25,000 in the 2001/2002 fiscal year.

INSTITUTIONAL WASTE REDUCTION

INSTITUTIONAL ORGANIC WASTE MANAGEMENT

Proponent: University of Manitoba
Date Approved: May 28, 2002
Total Amount Approved: $45,000.00
Total Amount Expended: $45,000.00

Summary:

A grant of $45,000.00 was approved to evaluate, develop and demonstrate efficient methods to manage organic solid waste generated on campus at the University of Manitoba. An estimated 300 Tonnes of organic waste is landfilled by the University each year. The project will be completed in four phases: Phase I will evaluate a pilot source separation and collection system that will test three collection container technologies and transportation issues. Phase II will undertake an audit of the composition of solid waste streams in two different educational institutions. Phase III will involve bench-scale composting studies to determine the ideal compost mixture and design values, and Phase IV will provide pre-design and comparison of source separation, collection, hauling and composting systems, including technical environmental and economic comparison of alternatives.

INTEGRATED WASTE MANAGEMENT

BAKERS NARROWS & CLEARWATER PARK DISTRICT RECYCLING ENHANCEMENT

Proponent: The Pas and Area Recycling in partnership with Manitoba Conservation
Date Approved: February 20, 2003
Total Amount Approved: $10,200.00
Total Amount Expended: $10,200.00

Summary:

A grant of $10,200.00 was approved to enhance the recycling programs for the Bakers Narrow Park District and Clearwater Lake Park District. The Park Districts in partnership with The Pas and Area Recycling will purchase two recycling trailers for use. Recyclables will be collected for transfer to The Pas and Flin Flon. The trailer system has been piloted as part of the regional recycling system used by The Pas and Area Recycling. New revenues will be derived from Manitoba Product Stewardship Corporation support payments.

CURBSIDE RECYCLING INITIATIVE

Proponent: Rural Municipality of Victoria
Date Approved: February 20, 2003
Total Amount Approved: $4,500.00
Total Amount Expended: $4,500.00

Summary:

A grant of $4,500.00 was approved to establish a curbside recycling program in the community of Holland. The program will be initiated through the distribution of blue boxes and promotional materials. Portage & District Recycling will provide semi-monthly pickup services.

PAINT LAKE RECYCLING ENHANCEMENT PROJECT

Proponent: Paint Lake Cottage Association in partnership with Manitoba Conservation
Date Approved: February 20, 2003
Total Amount Approved: $14,200.00
Total Amount Expended: $14,200.00

Summary:

A grant of $14,200.00 was approved to enhance the recycling program for Paint Lake Park near Thompson, Manitoba. Paint Lake Cottagers Association will purchase a trailer for use by the park. Recyclables will be collected for transfer to the Thompson Recycling Centre. The trailer system has been piloted as part of the regional recycling system. New revenues will be derived from Manitoba Product Stewardship Corporation support payments.

RECYCLE DEPOT UPGRADE

Proponent: Town of Virden
Date Approved: February 20, 2003
Total Amount Approved: $15,400.00
Total Amount Expended: $15,400.00

Summary:

A grant of $15,400.00 was approved to upgrade the current regional recycling facility to accommodate new materials (cardboard and residential recyclables) and improve material handling efficiency. This will be primarily accomplished through the addition of a sorting conveyor.

RECYCLING FOR TOMORROW

Proponent: Rural Municipality of Lansdowne
Date Approved: December 6, 2002
Total Amount Approved: $3,500.00
Total Amount Expended: $3,500.00

Summary:

A grant of $3,500.00 was approved to build a recycling depot at the Arden landfill site. The project will provide the opportunity for the community to promote and encourage recycling activities.

SNOW LAKE RECYCLING CENTRE EQUIPMENT

Proponent: Town of Snow Lake
Date Approved: December 6, 2002
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to improve the efficiency of the Town of Snow Lake's recycling centre with the purchase of a baler, glass crusher and pallet jack. Storage space for the bulk, unprocessed materials is limited, and the cost of shipping it in this state is not practical. This equipment will greatly improve the efficiency and cost-effectiveness of the program. Other funding partners include the Town of Snow Lake and the Snow Lake Lions Club.

WHITESHELL PARK (WESTHAWK DISTRICT) RECYCLING ENHANCEMENT PROJECT

Proponent: Manitoba Conservation
Date Approved: February 20, 2003
Total Amount Approved: $24,300.00
Total Amount Expended: $24,300.00

Summary:

A grant of $24,300.00 was approved to enhance the recycling program for the Whiteshell Provincial Park (West Hawk Lake District). Recyclables will be collected from recycling depots in the District by Parks Staff and transported to the South Whiteshell Transfer Station. Recyclables will be collected in a separate 45 cubic yard roll-off bin and when full, hauled to Eastman Recycling Services in Steinbach. Funding is being used to purchase the roll-off container and 20 rear loading containers for recyclables. Over 650 Tonnes can be collected and new revenues derived from Manitoba Product Stewardship Corporation support payments. The recycling system will also reduce waste transfer costs and waste disposal fees.

MARKET DEVELOPMENT

COMPOST COMMERCIALIZATION

Proponent: City of Brandon
Date Approved: December 6, 2002
Total Amount Approved: $24,500.00
Total Amount Expended: $24,500.00

Summary:

A grant of $24,500.00 was approved to conduct a study and trials to develop and market composted organic waste with a cost-recovery perspective. The project will be conducted in four steps: analysis of the current composting system in Brandon, analysis of the quality and quantity of the compost currently being produced there, and assessment of application and use of compost, and establishment of a processing and commercial marketing system.

PHONE BOOK SHREDDING

Proponent: Gateway Resources, Winkler
Date Approved: June 17, 2002
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to purchase a shredder and scale at Gateway Resources Recycling Centre in Winkler. The equipment is needed to process old telephone books, because the ink content makes them unacceptable in the paper-recycling stream. The goal of the project is to shred and bale the old phone books, and market it as packing and bedding material for local interested businesses. This project will help to divert paper waste that would otherwise be landfilled.

RE-FREEZE ANTIFREEZE RECYCLING

Proponent: Re-Freeze Antifreeze Recycling
Date Approved: December 6, 2002
Total Amount Approved: $5,000.00
Total Amount Expended: $5,000.00

Summary:

A grant of $5,000.00 was approved to further develop an antifreeze recycling service for businesses throughout Winnipeg. The service will involve distribution of antifreeze collection drums to clients. Full drums will be picked up and the spent antifreeze will be processed at the processing facility to return it to a useable form. The finished product will be returned to the client for reuse. This service will divert used antifreeze from entering the environment.

POLLUTION PREVENTION

CCME POLLUTION PREVENTION AWARDS PROGRAM 2002

Proponent: Canadian Council of Ministers of the Environment (CCME)
Date Approved: December 6, 2002
Total Amount Approved: $5,000.00
Total Amount Expended: $5,000.00

Summary:

A grant of $5,000.00 was approved to assist in carrying out the Pollution Prevention Awards Program for 2002. The Awards Program recognizes companies and organizations that have found innovative ways to minimize or avoid creating pollutants and waste.

END OF LIFE CYCLE MANAGEMENT OF WHITE-GOODS & OZONE DEPLETING SUBSTANCES (ODS)

Proponent: Manitoba Ozone Protection Industry Association (MOPIA) Inc.
Date Approved: December 6, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to develop proper end of life-cycle strategies for white-goods and ozone depleting substances (ODS). In partnership with Manitoba Conservation, MOPIA will work to identify available options for industry, government and consumers in white goods life cycle management; recommend and demonstrate appropriate management practices including storage, decommissioning and ODS recovery; identification of management system costs and financial responsibility; and the quantity of disposed white goods and ODS generated throughout Manitoba.

HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT WORKSHOP

Proponent: Manitoba Golf Superintendents Association
Date Approved: June 17, 2002
Total Amount Approved: $2,000.00
Total Amount Expended: $2,000.00

Summary:

A grant of $2,000.00 was approved to develop and deliver a workshop focused on educating and training people in Manitoba's golf sector in safety, health and environmental issues. The workshop is intended to educate golf superintendents, owners, managers and golf course staff in improved operational and environmental practices by discussing issues and concerns and providing possible solutions and recommendations. A major focus of the workshop will be Integrated Pest Management (IPM). An IPM expert will be brought in to train workshop attendees.

USED OIL FILTER CRUSHER

Proponent: KT EnviroClean Inc.
Date Approved: December 6, 2002
Total Amount Approved: $15,000.00
Total Amount Expended: $15,000.00

Summary:

A grant of $15,000.00 was approved to develop a used oil filter processing system that will separate oil filter parts that may be in turn recycled. The processing system will separate filter parts so the metal, rubber gaskets, and filter components can be recovered for recycling or appropriate disposal.

PROMOTION AND EDUCATION

2003 SOLID WASTE MANAGEMENT CONFERENCE

Proponent: Solid Waste Association of North America (SWANA), Canadian Prairie Chapter
Date Approved: December 6, 2002
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,00.00 was approved to assist SWANA, in association with Resource Conservation Manitoba and Manitoba Association of Regional Recyclers, host the 2003 Annual Solid Waste Conference in Brandon, Manitoba. The conference showcases waste management technologies and practices throughout Canada, presents innovations and developments in waste reduction, and provides training workshops for participants.

ENVIRONMENTAL INFORMATION DELIVERY SERVICE

Proponent: Resource Conservation Manitoba
Date Approved: December 6, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to support the delivery of public information services on waste reduction, climate change and green transportation in partnership with Resource Conservation Manitoba (RCM). The grant will offset costs associated with the delivery of information dissemination services including mailing, printing, phone, website maintenance and other costs. The project service and performance measurement guidelines will be established in a Memorandum of Understanding (MOU) between RCM and Manitoba Conservation.

GREEN LIVING 101

Proponent: The Marquis Project
Date Approved: February 20, 2003
Total Amount Approved: $20,000.00
Total Amount Expended: $20,000.00

Summary:

A grant of $20,000.00 was approved to promote the environmental and economic benefits of composting and recycling through the development of an educational program and pilot template that can be used throughout Manitoba. This project will build on the educational model developed by their project, Composting 101 – First Aid For Our Community & Our Planet that received WRAPP funding in FY 2001/2002. Other project partners include the City of Brandon, and Westman Recycling Council.

WASTE REDUCTION WEBSITE

Proponent: Emerge Knowledge Design
Date Approved: December 6, 2002
Total Amount Approved: $24,900.00
Total Amount Expended: $24,900.00

Summary:

A grant of $24,900.00 was approved to develop a comprehensive waste management resource website in partnership with Resource Conservation Manitoba and Manitoba Conservation. The website will act as a "one stop shop" resource for organizations, government and the general public. Information on all the current related activities in Manitoba, including waste management, recycling, composting, contact info, an information source directory, regulatory information, educational information and more.

WASTE REDUCTION WEEK 2002

Proponent: Resource Conservation Manitoba (RCM)
Date Approved: December 6, 2002
Total Amount Approved: $5,000.00
Total Amount Expended: $5,000.00

Summary:

A grant of $5,000.00 was approved to promote waste reduction activities throughout Manitoba's communities, businesses and schools through the second annual National Waste Reduction Week held October 21 to 27, 2002. RCM co-ordinated the flow of information and materials between the national program and Manitoba participants.

REGIONAL RECYCLING

NORTHERN MANITOBA INTEGRATED WASTE MANAGEMENT, PHASE II (THOMPSON)

Proponent: North Central Development
Date Approved: July 23, 2002
Total Amount Approved: $36,800.00
Total Amount Expended: $36,800.00

Summary:

A grant of $36,800.00 was approved to conduct the second phase (Implementation Phase) of the Northern Manitoba Integrated Waste Management System pilot project. This phase involves the implementation of the regional recycling system in the seven pilot communities, based on the waste diversion strategies developed in the first phase of the project. Phase II activities include: waste management strategy implementation; promotion and resident education; establishing material collection system; system monitoring; and promotion to other communities. A regional recycling co-ordinator, based at North Central Development, will be hired to co-ordinate activities. Funding partners include Indian and Northern Affairs Canada (INAC) and Manitoba Product Stewardship Corporation (MPSC).

RECYCLING FACILITY EXPANSION

Proponent: Riverdale Place Workshop
Date Approved: June 17, 2002
Total Amount Approved: $10,000.00
Total Amount Expended: $10,000.00

Summary:

A grant of $10,000.00 was approved to expand the (Arborg) workspace of the current Riverdale Place Workshop Recycling Facility to accommodate an increased volume of recycled materials. Funding is to assist construction of an extension on the current sorting building to accommodate this increase in volume. Riverdale Place Workshop Inc. is a non-profit organization for Mentally Challenged Adults, currently involving 30 clients in a variety of programs, including the recycling program.

REGIONAL GREEN CENTRE FOR RECYCLING AND COMPOSTING

Proponent: Town of Shoal Lake
Date Approved: June 17, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to expand the current Shoal Lake Recycling Program to a regional recycling program that would include the Rural Municipalities of Birtle, Rossburn, Shoal Lake and Strathclair. Also, the recycling program within Shoal Lake will be expanded to include a composting component that will include compost curbside pickup, and eventually expanding to the Town of Birtle as well. The WRAPP grant will assist in the costs of additional equipment, and expansion of the recycling centre.

REGIONAL RECYCLING CENTRE ENHANCEMENT

Proponent: Portage & District Recycling Inc.
Date Approved: February 20, 2003
Total Amount Approved: $25,000.00
Total Amount Expended: $25,000.00

Summary:

A grant of $25,000.00 was approved to enhance the efficiency of the current Portage & District Regional Recycling Facility. Project implementation will allow processing of more materials, and enable Portage & District Recycling Inc. to serve a larger region. Project activities include the purchase and installation of an efficient, high-capacity baler and in-ground conveyor system.

RURAL RECYCLING PROGRAM

Proponent: Village of Benito
Date Approved: June 17, 2002
Total Amount Approved: $3,550.00
Total Amount Expended: $3,550.00

Summary:

A grant of $3,500.00 was approved to develop a recycling depot at the Waste Disposal Grounds jointly owned by the Village of Benito and the Rural Municipality of Swan River. The project will allow residents who currently cannot recycle in this area to participate in recycling through access to metal recycling bins. It is estimated that this project would allow 1,500 people to participate in recycling who cannot currently participate. The depot will be promoted through advertisements in the local paper and information packages that will be made available to the public.

PROGRAM DEVELOPMENT

An allocation of up to $100,000 was approved for WRAPP program development in fiscal year 2002/03.

A total of $25,000 of this commitment was allocated as grants to the following projects:

- National Waste Reduction Week Promotion
- CCME Composting Guidelines Review
- Solid Waste Association of America (Canadian Prairie Chapter) Conference, Brandon, Manitoba, April 27 – 30, 2003
- CCME Pollution Prevention Awards Program

In addition, a total of $58,153.26 was expended on the following priority areas:

- Water Conservation Promotion and Education
- Sustainable Development Act Policy Development and Green Procurement Initiatives
- Household Hazardous Waste Management and Electronics Recycling Initiatives
- Northern Waste Management Committee Activities
- Ozone Depleting Substances Regulation Development
- Waste Management Facility Guidelines Development
- WRAPP Program Administration, Project Monitoring and STEP Student Position

ZEBRA MUSSEL PROGRAM

Managing Department: Manitoba Conservation, Water Branch
Date Approved: April 30, 2002
Total Amount Approved: $25,000.00
Total Amount Expended: $23,929.55

Summary:

Zebra mussels are small clam-like organisms that are not native to North America. They were discovered in Lake St. Claire in 1988 and it is generally believed that they were transported to North America in the ballast water of an ocean-going vessel. This ballast water was then discharged into the Great Lakes system in approximately 1986. Since that time, zebra mussels have spread quickly to all of the Great Lakes, the St. Lawrence and Ottawa rivers, Trent-Severn and Rideau Canal systems, Mississippi River from St. Paul Minnesota to the Gulf of Mexico delta including its major tributaries. More recently, zebra mussels have been found in the Missouri River at Sioux City, Iowa. Although not presently found in Manitoba waters, this costly foreign species is close to our watershed boundaries, in Thunder Bay on Lake Superior, and St. Paul Minnesota near the headwaters of the Mississippi River.

Zebra mussels attach themselves to any suitable submersed surface including the inside of man-made structures. They have caused millions of dollars of damage in the Great Lakes region of Ontario and the US by clogging the intakes of towns, cities, manufacturing industries, and utilities. They have severely reduced the recreational value of beach areas, and reduced native species important in the food chain.

Dispersion of zebra mussels in large connected water basins is largely due to the movement of commercial watercraft such as large ships and barges that have zebra mussels attached to the hull. Movement of zebra mussels from infected bodies of water to other, isolated bodies of water is due to accidental transport on water-based equipment including boats, trailers, motors, as well as in live wells and bait buckets.

Manitoba remains vulnerable to invasion by zebra mussels. For example, on June 30, 1999, zebra mussels were found on a pleasure boat that was purchased five days earlier at Orillia Ontario (Lake Simcoe) and moved by trailer to a yacht club on the Red River just north of Winnipeg. All zebra mussels were dead, and no immature mussels were found in the bilge water. As a precaution, however, the owner was ordered to scrape the boat and wash it down with water containing bleach.

Water quality data indicate that numerous lakes and rivers in Manitoba would support populations of zebra mussels should they be accidentally introduced into the province. Trailered watercraft with attached zebra mussels has resulted in dispersion to unconnected or isolated bodies of water throughout Michigan, Wisconsin, southern Ontario, and most recently, Minnesota. Trailered watercraft is recognized as a key vector of zebra mussel dispersion by North American agencies responsible for Aquatic Nuisance Species (ANS) prevention and management.

Thus, the likely route of entry of zebra mussels into Manitoba is accidental introduction from trailered recreational watercraft originating from the Great Lakes area of Ontario and from northeast and central US. The Manitoba / US border offers a convenient inspection location of recreational watercraft trailered from US locations. The international border crossings also offer an opportunity for visiting fishers and recreational boaters to be informed and surveyed about zebra mussels and other aquatic nuisance species.

GOAL AND OBJECTIVES:

The primary goal of this program is to prevent accidental introduction of zebra mussels and other aquatic nuisance species into the province of Manitoba by visitors transporting water-based equipment across our borders. This goal also provides a means to heighten public awareness to the issues of zebra mussels and other Aquatic Nuisance Species (ANS) in Manitoba. This goal will be achieved by the following objectives:

1. To inspect and survey visitors transporting water-based equipment at various international border crossings in eastern Manitoba. Whiteshell Provincial Park is also a popular recreational destination for visitors. As such, inspections of boats and trailers will be conducted where practical (boat launches, Travel Manitoba Information Centre).

2. To provide literature (brochure and gift of appreciation) to boating visitors about how to prevent accidental introduction of zebra mussels into Manitoba.

3. To supply information to Manitoba Conservation Regional offices (brochures, fact sheets, boat-ramp signage) for distribution and posting.

4. Target the boating audience with the clear message of preventing accidental zebra mussel introduction into Manitoba (information provided to registrants of fishing derbies, booth at the Mid-Canada Boat Show, advertisement in the Manitoba Angler's Guide, written articles).

5. To provide employment to students under the Green Team Employment Initiative and under the STEP Employment Initiative.

PROGRAM RESULTS 2002:

Communication is a key focus of the zebra mussel inspection program. An informed and educated boating public is critical in preventing accidental introduction of zebra mussels and other aquatic nuisance species.

Media Communications:
A zebra mussel informational brochure was reprinted with updated information. A zebra mussel informational booth was available at the Mid Canada Boat Show in February 2003. Zebra mussel information and prevention will appear again in the Angling Guide 2003 - 2004.

Education and Promotion:
A zebra mussel brochure was re-drafted and distributed for the boating public and a floating key-chain was designed and printed. Brochures outlining the steps boaters can take to prevent accidental introductions and key-chains reminding boaters to check their equipment were provided to each boater who was inspected and surveyed at the international borders and other boat ramps in eastern Manitoba.

- During the open water season of 2002, two Green Team students and two STEP students were employed by Manitoba Conservation to inspect trailered watercraft travelling into Manitoba. Inspections were made at the international border crossings at Emerson and Sprague. In addition, inspections of boat trailers were made at launch sites in the Whiteshell Provincial Park, and along the Red River corridor from Emerson to Selkirk Park. In addition to equipment inspections, boaters were surveyed (where possible) about their general knowledge of ANS. Results of the inspections and surveys are summarized as follows:

Border Crossings:

Students inspected trailered watercraft entering Manitoba at Sprague and Emerson from approximately June 14th to August 26th, 2001. Some inspections were conducted on weekends, but most were conducted during the period of Monday to Friday of each week.

- 104 border inspections and interviews were conducted at two international border locations, and interviews were conducted at various boat launches where boaters were present.
- 555 inspections of boat trailers were conducted in the Whiteshell Provincial Park;
- 298 trailered watercraft were recorded entering Manitoba across the Manitoba/Ontario border;
- 67% of the boaters interviewed (67) at the international borders originated from jurisdictions that have waters with zebra mussels;
- 19 (19%) of boaters from jurisdictions with zebra mussels did not check their equipment when last removed from the water;
- no evidence of zebra mussels or other ANS was found on any boat or trailer
- virtually every boater that was interviewed was aware of zebra mussels and other aquatic nuisance species.
- boats originated from the following jurisdictions: Minnesota (47%), Iowa (9%), North Dakota (8%), South Dakota (8%) , Wisconsin (7%)

Public Boat Launch Inspections:

- 652 boat trailers were inspected at ten launch sites;
- 593 trailers (91%) originated within Manitoba;
- 13 trailers (2%) originated from Minnesota;
- 10 trailers (1.5%) originated from Alberta;
- no evidence of zebra mussels or other ANS was found on boat trailers;

Road Counts of Trailered Watercraft:

- 298 trailered watercraft were observed travelling west across the Manitoba/Ontario border;
- 168 (56%) were boats trailered with Manitoba license plates;
- 42 (14%) were boats trailered with Ontario license plates;
- 17 (6%) were boats trailered with Minnesota license plates;
- 11 (4%) were boats trailered with Saskatchewan license plates;
- 245 (82%) of the trailered boats were fishing/pleasure boats, and 53 (18%) were jetski/canoes.

PROGRAM EVALUATION:

Positive Results:

A critical evaluation of the program indicates that during 2002, all five program objectives were met. Approximately 778 equipment inspections were completed from various locations in eastern Manitoba, and 126 surveys of visiting boaters were completed. Brochures and key-tags reminding boaters about Aquatic Nuisance Species (ANS) were handed out to visiting boaters. Information about the prevention of zebra mussels was also sent to registrants of those Manitoba fishing derbies likely to attract international competitors. In an effort to heighten the issue of zebra mussel prevention in Manitoba key chains and brochures were provided in the registration packages the first meeting of the Red River Basin Commission held in Winnipeg in January 2003.

In cooperation with Fisheries Branch, Green Team students working in Whiteshell Provincial Park spent some of their time at the Fish Hatchery educating visitors about zebra mussels, and prevention of invasive exotics. Manitoba Conservation regional offices were sent boat ramp signs reminding boaters not to transport zebra mussels and how to inspect their equipment before launching. These efforts provided employment for two Green Team Students and two STEP students.

Negative Results:
Although all objectives of the program were met, shortcomings were recognized at the planning of the project. Two STEP students were hired for the survey and inspections at Canada Custom facilities at the border crossings. These students were based in Winnipeg to ensure proper supervision and that meant much of their work-day was spent driving to Sprague or Emerson.

PROJECTS FROM PREVIOUS YEARS

PROGRAMS ALLOCATED FUNDING

DURING THE 2002/2003 FISCAL YEAR

Number of Projects: 6

Total Expended: $92,767.00

Project Name	Total Expended
SUSTAINABLE AGRICULTURAL PRACTICES	
Soil Sustainability Study – Livestock Stewardship Initiative	$47,493.10
UNDERSTANDING OUR ENVIRONMENT	
Manitoba Science Fair Sustainable Development Award	$400.00
Manitoba Youth Round Table for Sustainable Development	$11,259.78
Provincial Sustainability Indicators	$26,791.28
Petroleum Storage Tank Program	$122.84
Sila Alangotok – Inuit Observations on Climate Change Video and Teacher's Guide/Skownan, Our Land Our Future Video and Teacher's Guide	$6,700.00

DETAILED LISTING OF PROJECTS

FROM PREVIOUS YEARS WITH CARRYOVER AUTHORITY

IN THE 2002/2003 FISCAL YEAR

Projects listed below are those that were initially allocated funding from the Sustainable Development Innovations Fund in previous fiscal years, but had carryover authority for the 2002/2003 fiscal year.

Project descriptions have been provided in previous Annual Reports.

SUSTAINABLE AGRICULTURAL PRACTICES

SOIL SUSTAINABILITY STUDY: LIVESTOCK STEWARDSHIP INITIATIVE

Proponent:	Manitoba Conservation
Date Approved:	December 19, 2000
2002/03 Expenditures:	$47,493.10

UNDERSTANDING OUR ENVIRONMENT

MANITOBA SCIENCE FAIR SUSTAINABLE DEVELOPMENT AWARD

Proponent:	Manitoba Conservation
Date Approved:	January 24, 1995
2002/03 Expenditures:	$ 400.00
Total Amount Projected:	$2,700.00 (2003/2004 and beyond)

MANITOBA YOUTH ROUND TABLE FOR SUSTAINABLE DEVELOPMENT

Proponent:	Manitoba Conservation
Date Approved:	February 21, 2001
2002/03 Expenditures:	$11,259.78
Total Amount Projected:	$13,046.61 (2003/2004)

PETROLEUM STORAGE TANK PROGRAM

Proponent:	Manitoba Conservation
Date Approved:	April 21, 1994
2002/03 Expenditures:	$ 122.84
Total Amount Projected:	$29,585.59

PROVINCIAL SUSTAINABILITY INDICATORS

Proponent:	Manitoba Conservation
Date Approved:	June 10, 1998
2002/03 Expenditures:	$26,791.28
Total Amount Projected:	$41,976.12

SILA ALANGOTOK: INUIT OBSERVATIONS ON CLIMATE CHANGE VIDEO AND TEACHER'S GUIDE AND SKOWNAN: OUR LAND OUR FUTURE VIDEO AND TEACHER'S GUIDE

Proponent:	Manitoba Education and Youth
Date Approved:	October 10, 2001
2002/03 Expenditures:	$ 6,700.00
Total Amount Projected:	$13,150.00 (2003/2004)

APPENDIX I

Sustainable Development Innovations Fund
Five Year Expenditure Summary ($000)
for years ending March 31, 1999 - March 31, 2003

APPROPRIATION	Actual/*Adjusted Expenditures				
	1998/999	1999/00	2000/01	2001/02	2002/03
Sustainable Development Innovations Fund	2,784.1	1,633.9	2,073.3	2,865.8	2,956.3
Total	2,784.1	1,633.9	2,073.3	2,865.8	2,956.3

* Adjusted figures reflect historical data on a comparable basis in those appropriations affected by a re-organization during the years under review

Cover: Includes 15% Post-Consumer Waste